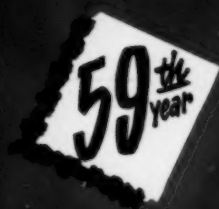


The Cotton Gin and Oil Mill

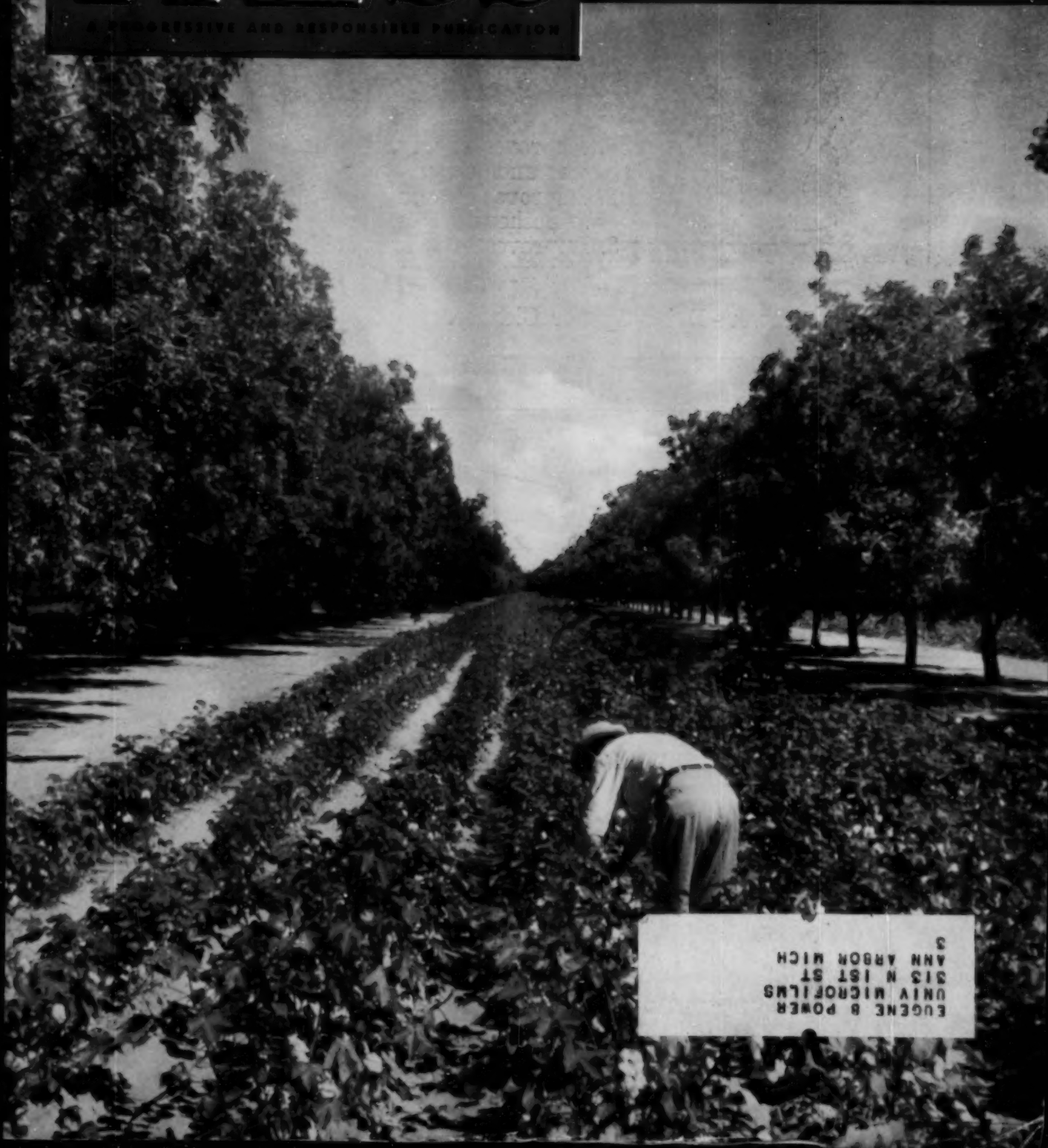
PRESS

SEPTEMBER 6, 1959



THE MAGAZINE OF THE COTTON GINNING
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OTHER OILSEED PROCESSORS
FROM CALIFORNIA TO
THE CAROLINAS

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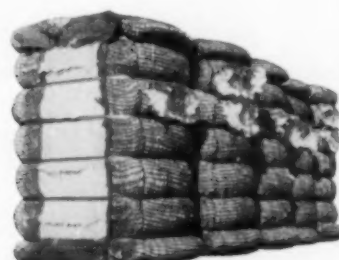
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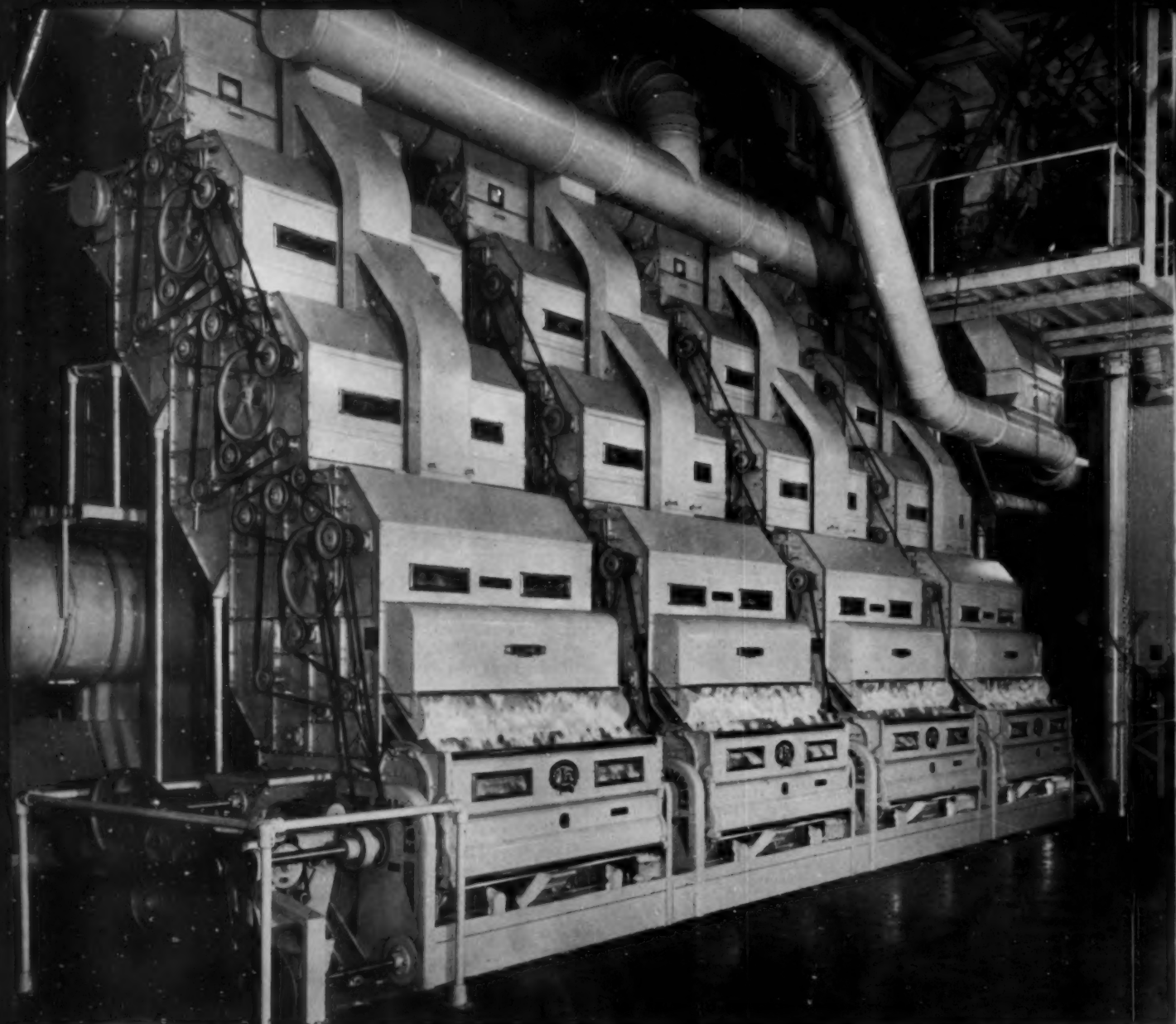
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COTTON

Research Progress

By

NESTOR B. KNOEPFLER

and

B. M. KOPACZ

Southern Regional Research Laboratory,
USDA, New Orleans

COTTON meets more different types of consumer needs than any other fiber. Its products account for 66 percent of all U.S. fiber consumption. Its industry provides an income for approximately 25 million Americans. But for all its usefulness, cotton has lost ground to other fibers in certain applications.

During the past two decades, changing economic factors and research on competing materials have confronted cotton with serious disadvantages. In addition, textile mills experienced an upturn in processing losses due to the advent of mechanized harvesting.

Recognizing the need for more utilization research on cotton and other farm commodities, Congress enacted legislation in 1938 to establish regional organizations. Underlying this new research endeavor was the concept that a continuing, coordinated research program, such as that carried out by some large industrial concerns to further the utilization of their products, could be applied to problems of American agriculture. Thus the utilization research endeavor on cotton was born and became a recognized part of the program of U.S. Department of Agriculture.

Cotton utilization research is carried out at the Southern Regional Research Laboratory, New Orleans, La. (This is one of the laboratories of the Southern Utilization and Development Division, Agricultural Research Service, USDA.)

The work is divided into three main areas: (1) fundamental or basic research to learn more about cotton fiber, how it behaves and why, and to provide information and tools to facilitate applied research, (2) research and development to improve the utilization of cotton by altering the fibers both chemically and physically, and (3) research to improve the utilization of cotton fiber by improving the methods and equipment used to process the fiber, from the bale to the finished textile fabric.

To arrive at the best possible program, the Southern Laboratory consults with the USDA and Cottonseed Research and Marketing Advisory Committee, the Cotton Utilization Panel, cotton associations, specially appointed collaborators, and various technical and industry organizations. Its own research facilities are supplemented by research carried out under contract with universities, industries, state experiment stations, and with trade organizations. Some trade associations aid by stationing research fellows at the Division.

Although cotton utilization research has been con-



THE TARPULIN being spread on the pitcher's mound at the New Orleans baseball stadium has been used six years and is still effective in keeping water out. Dark patches are where test samples were removed.

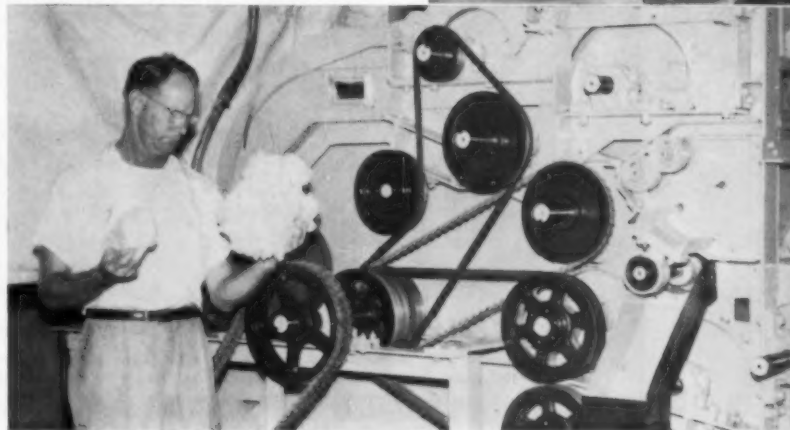


DR. J. DAVID REID, head of SURDD's Chemical Finishing Investigations, shows Jean Carter, 1958 Maid of Cotton, a blouse treated by a new formulation to give it wash-and-wear properties.



MRS. JANICE P. EVANS demonstrates the flame-resistance of treated cotton. Fabric will continue to char while the flame is applied but will not propagate flame when the source is removed.

E. F. WALLACE shows the effectiveness of the Opener-Cleaner by holding two samples of the same weight, one before and one after opening and cleaning, on the SRRL Opener-Cleaner in the background.



ducted on an expanded scale for less than 20 years, it has already proved highly profitable. This has not only benefited the farmer but has also greatly facilitated or improved the manufacture of many important products of direct value to the national welfare. Some research currently underway at the Southern Regional Research Laboratory is described briefly here, and a resume' given of some significant research developments and their value.

Current Research on Cotton

To accomplish its objective—the maintenance, improvement and extension of the utilization of cotton—research is carried out in four laboratories: a Plant Fibers Pioneering Research Laboratory, a Cotton Chemical Laboratory, a Cot-

ton Mechanical Laboratory, and an Engineering and Development Laboratory. In addition to assisting the staff of these laboratories, the Instrumentation and Analysis groups of the Division conduct research involving the use of special facilities, such as microscopy, spectroscopy and irradiation.

The Plant Fibers Pioneering Laboratory, a research group of outstanding scientists, works to obtain new fundamental information not now available on plant textile fibers, particularly cotton, and to relate information on polymer and fiber structure to the properties of the fibers. The purpose is to obtain a better understanding of textile phenomena and interpretation of the effects of mechanical and chemical treatments and modifications. Such funda-

mental information should assist greatly in reliably predicting the results of chemical and physical treatments. This minimizes or eliminates the need for experiments on an empirical basis. Specific objectives vary almost continually as goals are successively achieved or new leads developed.

Cotton Chemical Laboratory scientists devise chemical treatments and chemical processes designed to enhance or supplement the natural properties of cotton fiber. The research is of a basic as well as applied nature, and procedures for producing chemically modified cottons range from actual synthesis of new compounds to commercial application. These new organic compounds may react with the cellulose of cotton or within themselves to form polymers. The scientific principles discovered are used as a guide for the invention of new processes for improving cotton textiles.

In the Cotton Mechanical Laboratory the research objectives are improvement of the quality of cotton textiles, increased processing efficiency, lower processing costs, and development of products that will more completely utilize cotton's natural fiber properties and meet more satisfactorily end use requirements and consumer preferences.

Current studies include research relative to fiber, yarn, fabric properties, evaluations of processing characteristics of untreated and of chemically modified cotton fibers, design and development of new cotton products for selected or specific end uses, and determination of processing organization (unit weights, machine settings, drafts, twists, and speeds) that will yield optimum quality at lowest processing cost.

In the Engineering and Development Laboratory the main areas of research consist of mechanical and chemical engineering, machinery development and cost analysis. When research in a commodity laboratory has demonstrated the usefulness of a process or product, the Engineering and Development Laboratory may be called upon to scale up the process or to produce sufficient material for larger scale evaluation. This requires the design and installation of pilot plants and new or specialized equipment.

Dividends

Indirect Benefits

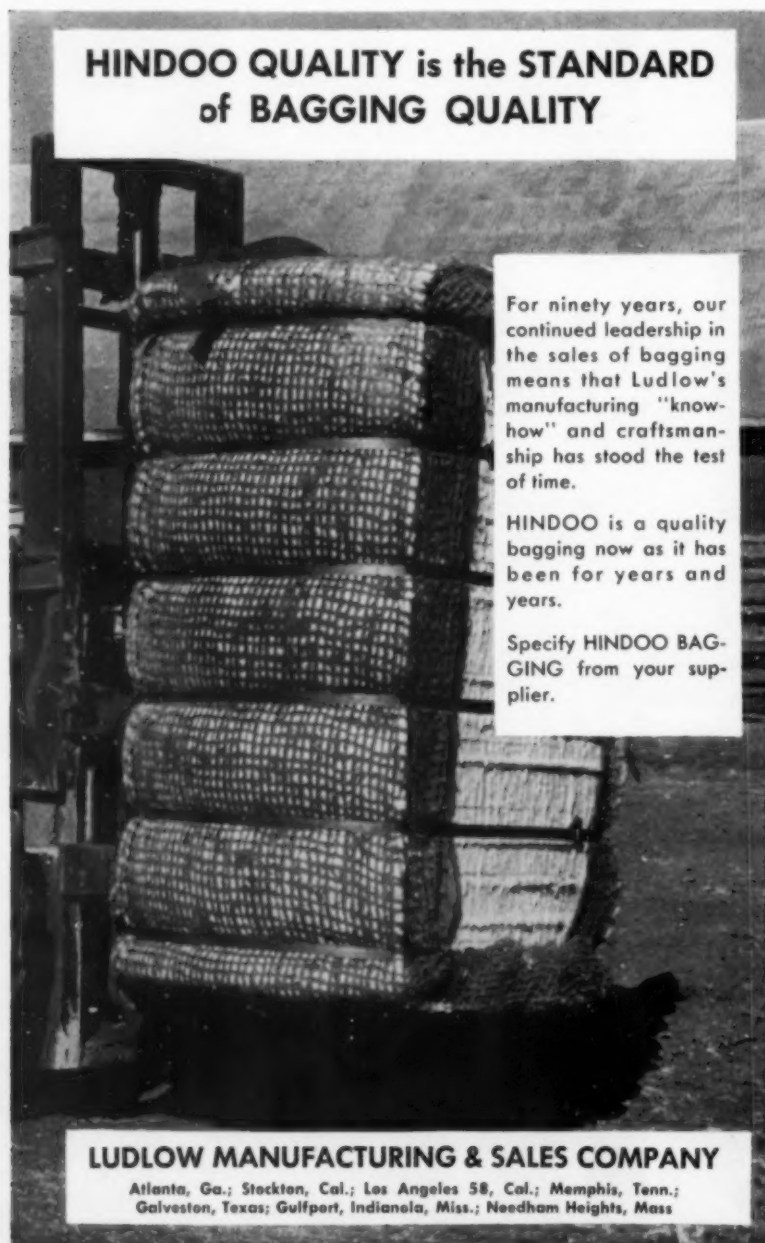
While the direct practical benefits of utilization research on cotton are undoubtedly great, probably the indirect benefits are even greater. Utilization research has provided huge quantities of new scientific information—both fundamental and applied—about the composition, chemistry, properties and processing of cotton.

For example, the Division has already provided new information in more than 2,000 published papers and patents. Most of these are on cotton and cottonseed. This information undoubtedly has been exceedingly helpful to agriculture, industry, defense agencies, consumers, and other research organizations.

Direct Benefits

• **Basic Cotton Fiber Research** — Fiber elongation, measured in some academic and research circles but accorded little attention as a guide to quality of commercial products because of the expense

(Continued on Page 34)



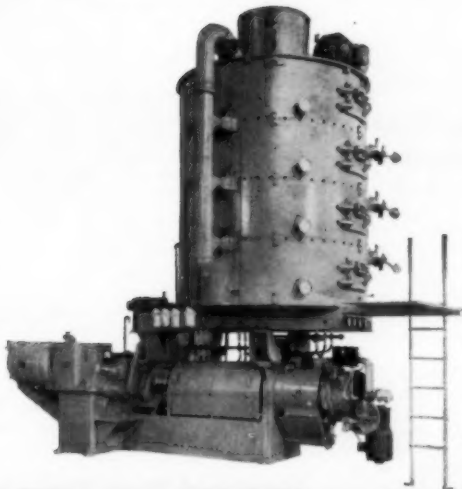
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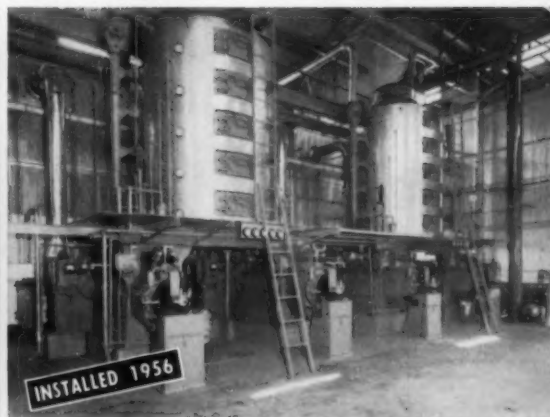
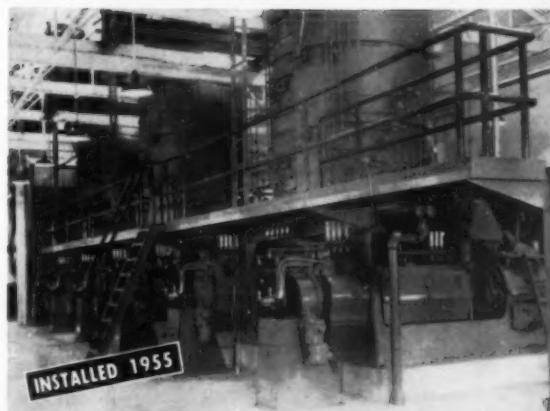
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• Two Soybean Groups Re-elect Officers

ALL OFFICERS were re-elected by the American Soybean Association and National Soybean Processors' Association at their annual meetings held in Des Moines, Aug. 18-20.

Officers of the American Association are John Sawyer, London, Ohio, president; C. G. Simcox, Assumption, Ill., vice-president; and George M. Strayer, Hudson, Iowa, executive vice-president and secretary-treasurer.

Re-elected to the board of directors for two-year terms were: Strayer; Ersel Walley, Fort Wayne, Ind.; Walter M. Scott, Jr., Tallulah, La.; O. H. Acom, Wardell, Mo.; David G. Wing, Mechanicsburg, Ohio; and John H. Butterfield, Pana, Ill.

• **Processors' Officers** — Re-elected for another year by the Processors' Association were the following officers: M. D. McVay, Minneapolis, chairman of the board of directors; Glenn Pogeler, Mason City, Iowa, vice-chairman of the board; R. G. Houghtlin, Chicago, president; Harold A. Abbott, Bloomington, Ill., treasurer; and Donald B. Walker, St. Louis, secretary.

Directors elected for a three-year term were: Sewell D. Andrews, Jr., Minneapolis; S. E. Cramer, Chicago; A. C. Hoehne, Minneapolis; W. E. Hoge, Fort Wayne, Ind.; Donald C. Ogg, Redfield, Iowa; and Harris T. Lyon, Chicago.

Ralph S. Moore, Wichita, Kan. was elected to serve a one-year term.

Hold-over directors are: D. O. Andreas, Mankato, Minn.; Earl J. Bru-

Galveston To Be Host To Superintendents

International Oil Mill Superintendents' Association will hold its 1959 annual convention, June 21-23 at Galveston, Texas. The Galvez Hotel will be headquarters. H. E. Wilson, P. O. Box 1180, Wharton, Texas, is secretary.

baker, New York; R. G. Golseth, Danville, Ill.; R. B. Jude, Buffalo, N.Y.; M. C. Larson, Muscatine, Iowa; W. H. Knapp, Cincinnati; E. E. Rhodes, Decatur, Ill.; H. R. Scroggs, Cedar Rapids, Iowa; William King Self, Marks, Miss.; Ralph Wells, Monmouth, Ill.; and Clark Yager, Clinton, Iowa.

Golseth and Rhodes were elected to the executive committee to serve two-year terms. The other directors on the executive committee are Andreas and Cramer.

• **Program Highlights** — American Association convention program highlights included:

Professor G. L. Jordan, University of Illinois, predicted an excellent demand for soybean meal, soybean prices at about the 1958 loan level, weakness in fats and oils prices and a 1958-59 crush that will leave only a modest carryover Oct. 1, 1959.

Opening of the St. Lawrence Waterway may cause a major economic boom in the soybean belt, making Chicago the leading soybean port on the Great Lakes,

Professor Joseph R. Hartley, Indiana University, said.

U.S. restrictive measures and boycotts of Japanese products are threatening the future of U.S. soybean trade with Japan, Mototaro Sugiyama, president of Hohnen Oil Co., Tokyo, and the Association of Oil and Fat Manufacturers of Japan, told the gathering.

Warning that the U.S. sooner or later must face competition from Communist China's soybeans was voiced by Shizuka Hayashi, managing director, Japanese American Soybean Institute, Tokyo.

Other speakers said that Spain, Turkey, Italy and other European countries will continue to need U.S. soybeans and their products for some time.

More and More Grain

Feed grain stocks will increase this season for the seventh consecutive year, USDA reports. Production will greatly exceed consumption in the coming months; and the season will begin next Oct. 1 with about seven percent larger stocks than on the same date in 1957, a previous record carryover.

Georgia Can Compete

Proof that Georgia farmers can compete with other areas was provided Sept. 4-5 by a tour of cotton farms making 600 to 1,200 pounds of lint per acre. The farms are participants in the Extension Service Complete Cotton Demonstration program. Production costs are estimated at 18 to 20 cents per pound of lint.



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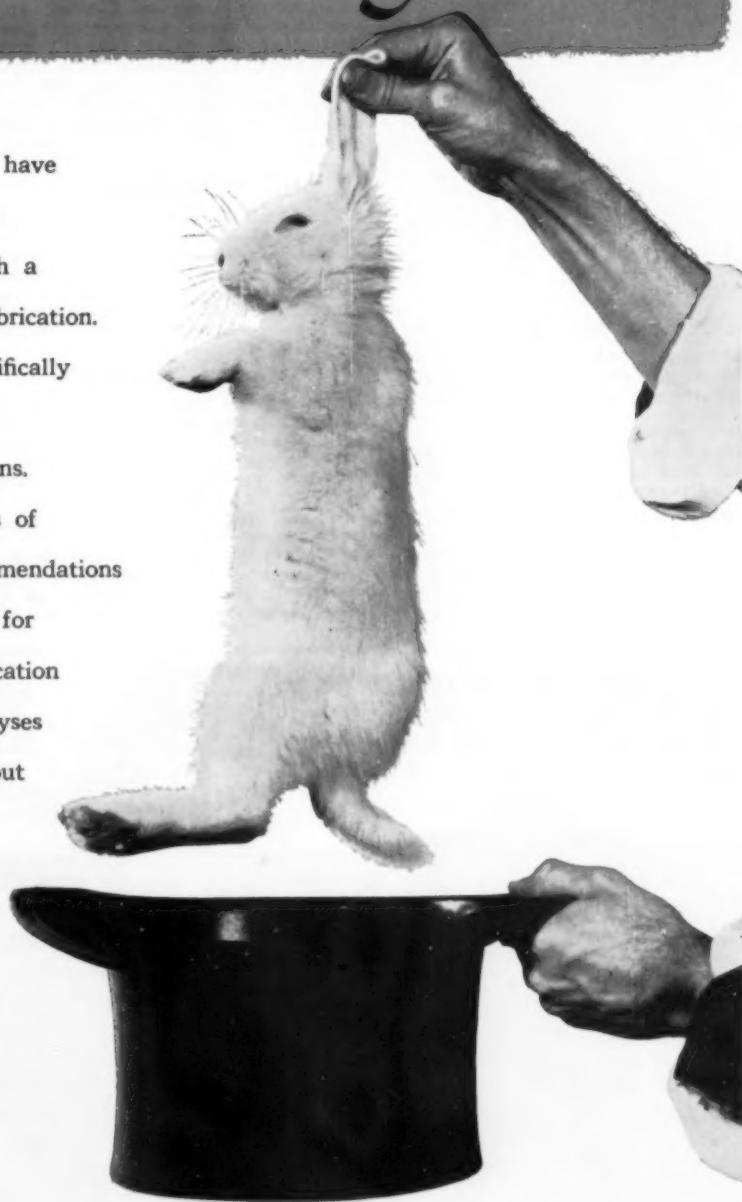
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The PRESS Box

• We've Just Begun To Fight

COTTON'S VICTORY in national legislation should encourage everyone in the industry to follow through so that the fruits of victory will be assured. Growers will have a choice of growing more cotton or less—which will they choose? No one wants any producer to grow cotton unless he can make money; but it is important that every ginner and crusher work to encourage production on every farm where it is profitable. National and state organizations can do much to provide information and leadership, but the real key to sound cotton leadership is in the local community. Now is the time for ginner and crushers to start working.

• Use Those Red Tags

GINNERS ARE RECEIVING red tags from the National Council and ginner's associations. These danger signals have proved effective in reducing losses wherever they've been used to identify fire-packed bales. Gin operators are urged to see that employees are instructed to use red tags.

To cite one of many examples that occur each season, it is suspected that a fire-packed bale was the cause of a fire Aug. 24 at Evergreen Gin Co., Evergreen, Ala. About 255 bales were involved in the fire, with only about 60

worth salvaging. The last bale was put in the warehouse Saturday afternoon when ginning stopped, and the fire was discovered at one a.m. Sunday. An inspection of bales and a red tag on a suspected bale might have prevented this fire.

Everyone, says the Cotton Warehouse Inspection Service, "should critically examine all freshly-ginned cotton before storing it."

• Don't Waste Water

WARNINGS against over-irrigating cotton and wasting available water are being issued throughout the irrigated areas of the Cotton Belt. Authorities agree that irrigating too late is wasteful and harmful to cotton; in most areas, the time for final irrigation is Sept. 1-10.

• Cotton and "Flychology"

COTTON TO THE rescue again! This time it is cotton cord. It seems that flies are attracted by the color red; they also like to rest on suspended strings. Researchers put the two together, added parathion (a contact poison), and came up with red, impregnated cotton cord. You won't find "Flychology" in the dictionary, but farmers and meat packers practicing it are delighted about the results they're getting. Known as Flycord, the product has been on the market

for a couple of years, with sales steadily increasing. Approved by the USDA, the cords give season-long, one-shot control. U.S. Public Health tests, as reported in the publication *Agribusiness Outlook*, are most impressive. Used only inside buildings, the device kills flies through their feet. They can't build up resistance to parathion, it seems.

• Christmas Tree Farm

IRRIGATED CHRISTMAS TREES are a possibility in Arizona. The first irrigated Christmas tree farm in the country could be that owned by Jim Mitchell near Chino Valley in Yavapai County. Last year Mitchell planted five acres of seedling white firs on irrigated farming land. They are showing about a 60 percent survival rate, and if this rate holds in the months ahead he may have started the first irrigated Christmas tree farm in the country.

• Garlic-Onions-Tears-Friends

GARLIC AND ONION devotees can "keep kissable" and still enjoy these flavors in their foods. Among new products on the market are garlic and onion seasoning in liquid form which reportedly leave no objectionable "after-taste" or odor. As for "tearless onions," frozen, chopped onions, labeled "Weep-NoMore," are being test-marketed in the San Francisco area. Freezing immobilizes the volatile material that brings tears when fresh onions are chopped up. The tiny onion cubes are individually frozen so the cook can pour out the amount needed for a recipe, then put the leftover back in the freezer.

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Fats and Oils Outlook:

World Supplies Exceed Demand

WORLD PRODUCTION of fats and oils has been increasing about 750,000 short tons yearly—twice as fast as needed to meet the population increase—George A. Parks, USDA Foreign Agricultural Service said recently. In a talk before the American Soybean Association (see story elsewhere in this issue), Parks brought out these facts of interest to the fats and oils industry:

In 1958, world production was not materially different from that of 1957. World exports in 1958 may be about the same or possibly below those of 1957. Declining prices this year have encouraged importing countries to delay purchases and reduce stock. As far as we know, it has not resulted in any reduction in consumption. There have been some relatively small stock build-ups in exporting countries.

Based on present indications, world production of fats and oils in 1959 will set an all-time record. World production may exceed 1958 by over a million short tons, oil equivalent basis. Over half of this increase would be in the U.S. Over half of the expected increase would come in the edible vegetable oils category, which includes cottonseed, peanut, soybean, sunflower, olive and rapeseed oils. About a fourth of the expected increase will be in the palm oils group. Larger output of industrial oil and animal fats will account for the balance. Aside from the expected in-

creases in the U.S. here are some preliminary appraisals of prospects elsewhere:

Outturn of olive oil in the Mediterranean Basin countries probably will exceed last year by about 125,000 short tons. Total peanut production in West Africa may be somewhat smaller than last year's record volume.

We know little about the prospective oilseed crops in China-Manchuria, although our understanding is that the weather has been favorable to good plant growth.

Production of rapeseed in Western Europe in 1958 probably is about the same as last year. Japan's crop this year is reduced about 10 percent from last year's 315,000 tons oil equivalent. Canada's crop will set a new record, up nearly 15 percent from last year. The outturn of soybeans in Canada this year seems likely to approximate last year's record level of 6,500,000 bushels.

The sunflower seed crop in Argentina has been officially estimated at 893,000 short tons, nearly one-fourth above last season.

Copra production in the coming year is expected to be up over 10 percent from the reduced levels of 1958. Palm oil and palm kernel oil from the major producing areas of Africa, Indonesia and Malaya are expected to be about the same as last year.

It is difficult to appraise the outlook for flaxseed inasmuch as little is known

about the forthcoming crop in the Argentine. Nevertheless, with the more favorable price being paid to producers of flaxseed, it would seem fair to assume that there will be an increase from the 24 million bushels produced in each of the last two years. In India, where the crop is harvested in January, it would seem unlikely that production would vary appreciably from the average in recent years. Bad weather in Canada is hurting flaxseed prospects. U.S. lard production is expected to be up by about 100,000 tons and cottonseed and soybeans will be up an equivalent of about 335,000 tons of oil. This does not include the oil which could be produced from the carry-in of soybeans. Indicated increases in linseed and tallow will account for another approximate 175,000 tons, oil equivalent basis.

Parks warned that these developments have changed the fats and oils picture, saying "the strong demand and above-support prices for soybeans are largely a thing of the past."

Efforts to develop markets must be redoubled, he added, and price competition cannot be ignored. He cited, as an example, the unusual situation in world markets, where peanut oil currently is underselling cottonseed and soybean oils. He concluded that it is impossible to predict, now, whether exports of U.S. oilseeds and oil can be maintained in 1959 at levels of the past season.

Plow-Up Extended

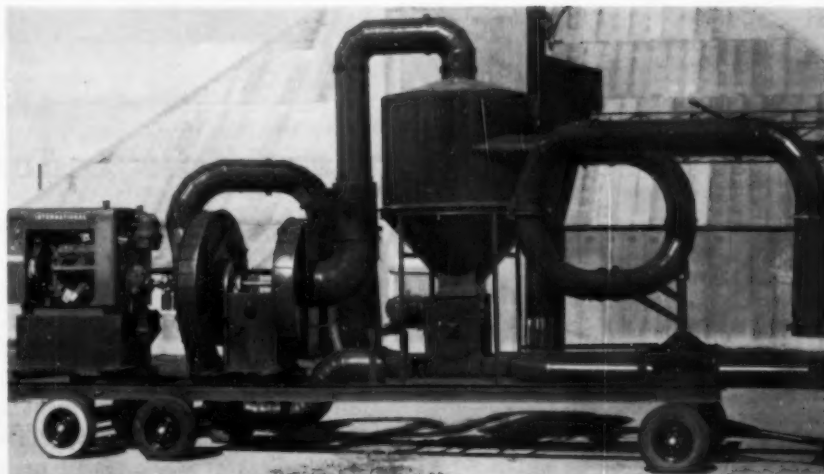
An extension of the cotton plow-up date to Sept. 12 has been given the Lower Rio Grande Valley under the pink bollworm quarantine.

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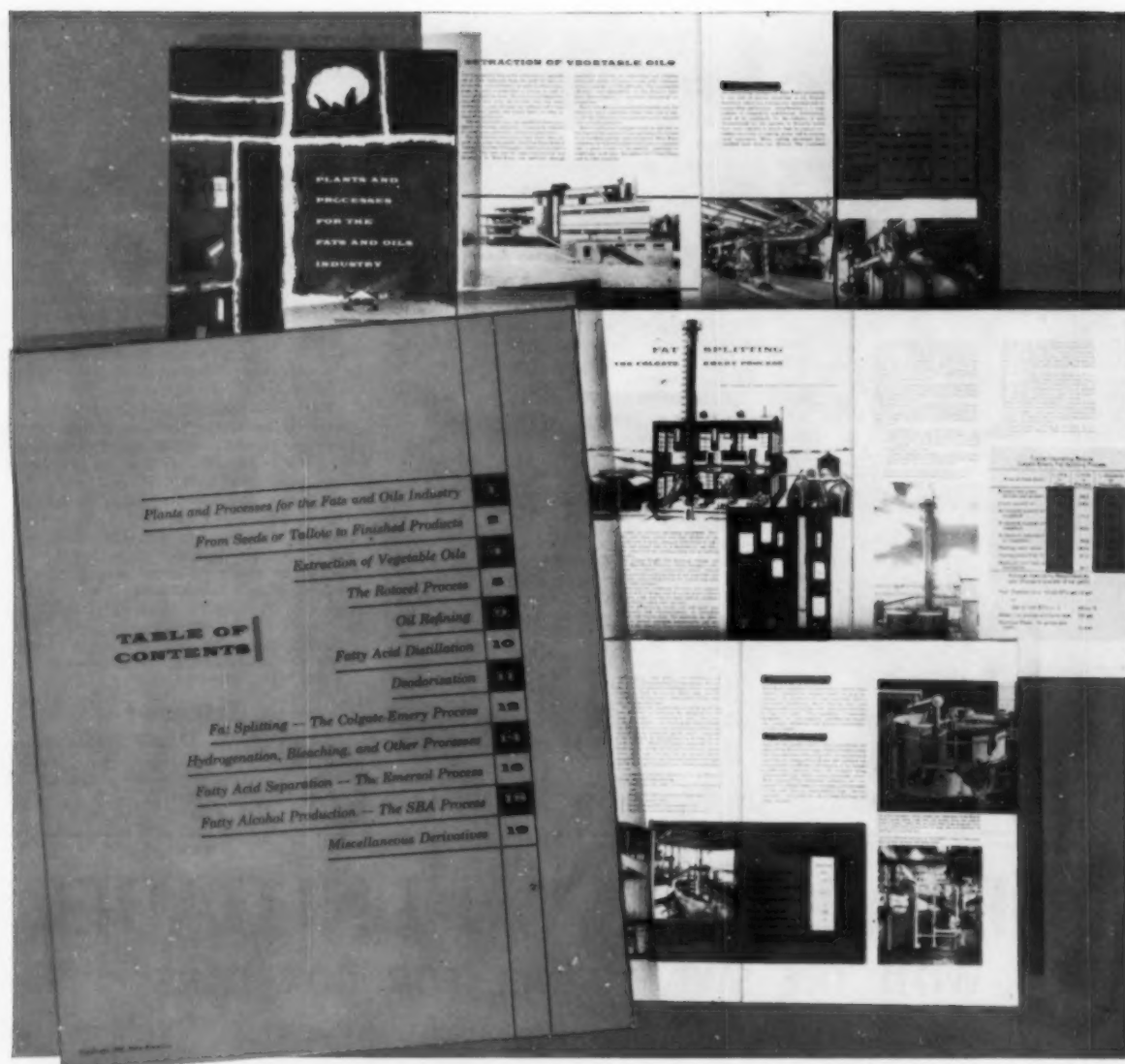
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SEPTEMBER 6, 1958 • THE COTTON GIN AND OIL MILL PRESS

• Marx To Preside At Conference

LAWRENCE MARX, JR., president, National Association of Finishers of Textile Fabrics, will be general chairman of the seventh Annual Chemical Finishing Conference.

The conference, sponsored by the National Cotton Council, will be held in Washington, Oct. 1-2 at the Statler Hotel. Recent developments in finishes for wash and wear cottons will be the subject of a majority of the technical papers presented.

Marx is also vice-president and director of United Merchants and Manufacturers, Inc., New York, and vice-president of the Clearwater Finishing Co.

Session chairmen for the opening day of the conference are J. David Reid, head, chemical finishing investigations, Southern Regional Research Laboratory, New Orleans; and Alfred E. Brown, vice-president, Harris Research Laboratory, Washington.

Session chairmen for the second day will be Arnold L. Lippert, vice-president and director of research, Joseph Bancroft and Sons Co., Wilmington, Del.; and John W. Howard, staff member, utilization research division, National Cotton Council.

More than 300 textile scientists from private industry, educational institutions and government are expected to attend the meeting.

Robert C. Gregg Dies

Robert Clayton Gregg of Memphis died Aug. 25 at the age of 88. For many years, prior to his retirement in 1940, he operated gins for a number of Memphis firms.

Gregg was born in Marshall County, Miss. and moved to Memphis about 45 years ago. He is survived by his daughter Mrs. Karl Kempf of Memphis, a son Robert C. Gregg of Union City, Tenn., four sisters and three grandchildren.

Grain Dealers Meeting

Madison Clement, Waco, president, and Ray B. Bowden, longtime leader in the organization, are among speakers at the annual meeting of the Grain and Feed Dealers' National Association. The meeting starts Sept. 7 in St. Louis. The Sheraton-Jefferson Hotel is headquarters.

Chemists Meet in Chicago

Fourteen thousand chemists and chemical engineers are in Chicago for the 134th annual meeting of the American Chemical Society, Sept. 7-12. Many papers dealing with fats and oils, foods and related topics are on the agenda.

McMahan To Visit Gins

E. O. McMahan, secretary-treasurer, Carolinas Ginners' Association, returns to the office at Bennettsville, S.C., Sept. 15 and will start a series of visits to ginners.

Council Holding Meetings

National Cotton Council is holding a series of meetings in California's Kern County, Sept. 3-9.

Defoliation Will Pay In Machine Picking

Proper defoliation will pay the farmer who plans to pick his cotton mechanically, says Fred C. Elliott, Texas Extension cotton specialist.

He adds that this is especially true if the crop has tall, leafy succulent plants and a good yield.

Generally, defoliation should start after 60 percent of the bolls are open. State guides and manufacturers' recommendations are available to provide detailed information.

Elliott points out that a combination of one pound per acre of 90 percent amino triazole with one-half the recommended spray defoliant usually gives good defoliation and adequate control

of second growth. Except under favorable conditions, true defoliant does not always give acceptable results for mechanical stripping, says Elliott. Therefore, desiccants are recommended, but they should not be used until the top bolls are mature and a full 60 percent or more of the cotton is open. Desiccants are used to kill and dry out the plants if the cotton is to be stripped by machine before frost.

Elliott warns that good coverage of the cotton plant by the defoliant or desiccant is a "must" for the best possible defoliation. Spray applied in too little water per acre is the most common mistake made by operators of ground sprayer rigs and planes.

Finally, the specialist advises producers to keep cotton dry, loose and clean for better ginning and quality.

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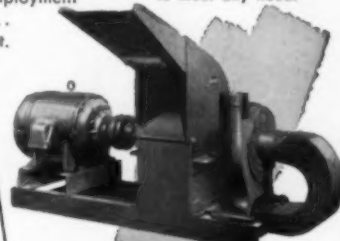
With grain becoming increasingly more important in the agricultural economy of the South, forward-looking cotton ginners have already adapted their operations to include Kelly Duplex grain handling and processing equipment. They've found that this equipment, designed and built for top efficiency, low maintenance and long life, is able to give them steady, year 'round business and employment... greatly increased volume... and, above all, a GOOD profit. It can do the same for you!

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| <input type="checkbox"/> Regular Corn Sheller | <input type="checkbox"/> Corn Crusher-Regulator |
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Producer Must Keep Users' Confidence

■ **TEXTILE LEADER** stresses need to compete at Plains Growers' meeting; Fortenberry, Forkner and Smith elected.

Cotton producers can hold their markets only by maintaining the manufacturers' confidence in the fiber and its future, Plains Cotton Growers were told Aug. 29 by William E. Reid, textile executive, at their annual meeting.

"The manufacturer will use any fiber that meets the needs of the market," the president of Reigel Textile Corp. told the Lubbock meeting. "He is not wedded to cotton as a raw material."

• **Officers Named**—W. O. Fortenberry, Lubbock, and Wilmer Smith, New Home, were re-elected president and vice-president, respectively, by Plains Growers.

Roy Forkner, Lubbock ginner, who is a past president of Texas Cotton Ginners' Association, was elected a director and secretary-treasurer. Forkner succeeds Roy B. Davis, Plains Co-op Oil Mill, as a director, and M. A. (Rip) Elms, Littlefield, as secretary-treasurer.

Directors of the PCG, elected to serve this year, include: Guy Nickels and Joe Sooter, Bailey County; Jim Burkett and W. C. Couch, Borden; Bill Williamson



OFFICERS of Plains Cotton Growers shown here are W. O. Fortenberry, Lubbock, president; Roy Forkner, Lubbock, secretary-treasurer; and Wilmer Smith, New Home, vice-president.

and Lee Deavenport, Briscoe; George Gabel and Edd McLeroy, Castro; Willard Cox and J. R. Kuykendall, Cochran; Ed Smith and Mell Cherry, Crosby; E. D. David and Ben Dopson, Dawson; Joel Hodges, Jr., and W. H. Andrews, Deaf Smith; Lloyd Hindman and G. B. Morris, Dickens; Jerry Cooper and Lester Carter, Floyd; Claude Hearne and Vaughn Bates, Gaines; Powell Shytles

and W. C. Bush, Garza; John McQuien and J. O. Bass, Hale; Orville Bailey and Jack Sherrod, Hockley; Ralph White, Howard; Clarence Davis and Willie Steffey, Lamb; Roy Forkner and W. O. Fortenberry, Lubbock; Wilmer Smith and C. M. Walker, Lynn; Caldwell Smith, Motley; B. E. Nichols and James Mabry, Parmer; R. B. Dawson and Virgil Hill, Swisher; Homer Barron and Charles S. Kersh, Terry; and Rod Duff and Bill Lloyd, Yoakum.

• **"Too Much Cotton"**—W. R. (Bob) Poage, Waco, vice-chairman of the House Agriculture Committee, and Reid were featured speakers. Senator Ralph Yarborough of Austin, and Congressman George Mahon, Lubbock, made brief talks.

New legislation under which farm-

ers will operate for the next two years probably will not meet agriculture's long-range problems, Poage said. He told the farmers that he believes "we're going to build up too much cotton in the next two years" under this legislation. "And if we do, we're going to have to re-evaluate our farm program," he said.

The government in the long run will be faced with the necessity of making direct subsidy payments to cotton farmers, he added.

Reid, who is also a director of the American Cotton Manufacturers Institute, told the group that "we need a realistic cotton policy that will enable us to expand our foreign markets and to sell aggressively against our competition here and abroad."


Reid said the cotton producer "must recognize that the manufacturer is interested in making and selling profitably textile fabrics."

"In the end, the manufacturer will make what the customer wants. And the customer's 'wants' include considerations of style, wearing quality, and price. You, the cotton producer, will hold the manufacturer by maintaining his confidence in the fiber and its future. I regret to tell you that this confidence is badly shaken."

The textile representative praised the new government cotton program, but added, "A competitive price alone will not solve cotton's problem, nor those of the textile industry. But, without a competitive price, there is no chance to maintain an aggressive cotton industry. The trend toward other textile fibers will be accelerated. The opportunity for non-textile products to capture more of the traditional textile market will be strengthened."

"Raw material accounts for more than 55 percent of each sales dollar in the textile industry. This is the underlying reason for my stressing the absolute necessity of a realistic cotton policy that will insure the quantities and qualities we need, at a competitive price. By a competitive price I do not neces-

(Continued on Page 29)




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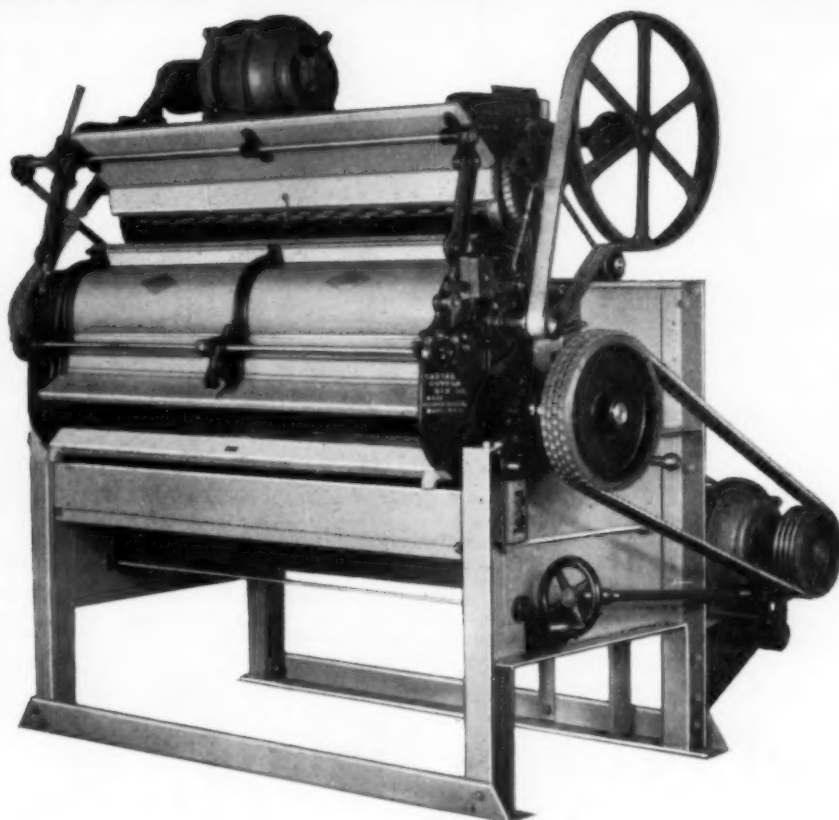
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STEERS in the Fresno Cattle Feeding Co. feedlot hustle to the trough as the truck dumps feed mixed with converted hydrolized vegetable oil and aureomycin in minerals. They clean the plate.

FIFTEEN THOUSAND STEERS yearly are fattening on one cotton oil mill's former waste product. Hydrolized vegetable oil is the product used by Fresno, Calif., cattlemen and obtained from Producers Cotton Oil Mill.

This operation is unique, even though other firms and feeders for a number of years have been using increasing quantities of fats in feeds.

Producers is not sure whether it originated the plan, when Manager Carter Sanders assigned Milton Munro the job of getting rid of soapstock; or whether Fresno Cattle Feeding Co. was first in seeking to substitute fat for a portion of the feed in its ration. Regardless of

Chester Cook of Merced, brought him their troubles.

Darden already was using MC-47, a slightly salty, syrup-like secondary by-product of the sugar beet industry, as a dressing on mixed cattle feeds purchased from the Producers feed mixing mill. (This material is perhaps best de-



CARTER SANDERS (above, left), manager of the Producers Cotton Oil Co. mill, shows what HVO is like before treatment. Will Frech, chemist, pours a sample to show what it is like after undergoing the treatment he devised in the mill's laboratory.

Mill and Feeders Make "Soapstock" Pay

who gets the credit, it's a happy idea for both parties.

The Fresno "Bee," in a recent feature article, tells that about 1,800 tons of soapstock at Producers had practically no value when the soap market vanished in 1955.

"It turned up in every conversation on fat sources for cattle feeds," Sanders recalls. "The boys in the feedlot wanted a cheap, year-round source of fat, and all I could think of was this stuff we were throwing away. I knew it had more fat than what they were using and here we were having trouble finding a way to get rid of it.

"We had one big advantage from the start. Our mill uses a soda ash refinery; it's one of the few in the country which does. Others use caustic lye. So we had no expensive reprocessing to do, just a water washing after the residue comes out of the centrifuges which extract the purified cottonseed oil."

The alkalinity of the hydrolized vegetable oil had its disadvantages—it could burn up much of the protein in the ration, it was nearly impossible to pour and no animal in its right mind would eat it, untreated.

Chemist Will Frech of Producers tackled the problem when Munro and R. B. (Bevo) Darden, foreman for feedlot owners W. R. Jenkins of Fresno and

scribed as a leftover from making monosodium glutamate, the food seasoning). Producers had been using it successfully as a feed additive for several years, and the cattle obviously relished it. Frech saw in its character something to help balance HVO's alkalinity, so the threesome began dosing the sludge with MC-47, mixing it half and half with molasses before adding it to the HVO.

• **Like Home Brew** — Happily, it came through as hoped and made the HVO not only palatable and safe for stock but also easier to handle. There was just one trouble. It reacted like home brew in a hot closet and foamed all over the lot when it "worked."

But, with practice, they learned to mix smaller batches with less additive and to give the blend room to "work." After foaming, the mix flowed easily, like heavy cream, and had taken on MC-47's more agreeable odor. And the alkalinity was nearly neutralized by the slightly acid MC-47, enough so cattle could eat it safely.

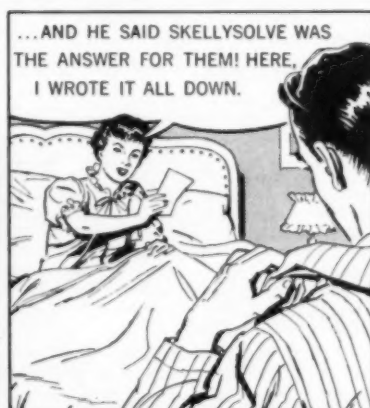
Tests showed the mixture could supply up to four percent of the feed formula's total fat content. Even poor cattle made quick gains on it. Mixing was the only problem left, and Producers' corporate engineer, Jack Witz, solved that.

He and his maintenance crew con-

(Continued on Page 26)

THIS is the heart of the conversion process used to mix hydrolized vegetable oil and MC-47 into a palatable dressing for cattle feed. Operator Ralph Posey (below) taps off a ladle full from a batch to show salesman Milton Munro, right, the progress of blending. The tank does the mixing.





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SKELLYSOLVE-B. Making edible oils and meals from soybeans, corn germs, flaxseed, peanuts, cottonseed and the like. Closed cup flash point about -25°F.

SKELLYSOLVE-C. Making both edible and inedible oils and meals, particularly where lower volatility than that of Skellysolve-B is desired because of warm condenser water. Closed cup flash point about 13°F.

SKELLYSOLVE-F. Extracting cottonseed, soybean meals and other products in laboratory analytical work. Originally made to conform to A.O.C.S. specifications for petroleum ether, and pharma-

ceutical extractions, where finest quality solvent is desired. Closed cup flash point about -50°F.

SKELLYSOLVE-H. Making edible and inedible oils and meals where greater volatility is desired than that of Skellysolve C or L. Closed cup flash point about -16°F.

SKELLYSOLVE-L. For degreasing meat scraps, extracting oil-saturated fuller's earth or other general extraction. Closed cup flash point about 12°F.

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from our Washington Bureau

by FRED BAILEY
WASHINGTON REPRESENTATIVE



The Cotton Gin and Oil Mill Press

• **Forty Percent More Acres** — Permissive acreage under Plan B of the new cotton law will be a full 40 percent larger than regularly assigned allotments. The law itself is not mandatory, saying only that the Secretary of Agriculture may authorize overplanting by up to 40 percent—not that he must.

Privately, however, Benson is committed to giving a green light for the entire 40 percent. That was part of the bargain in which cotton-state lawmakers agreed to new, lower price support levels.

How much cotton will be planted in 1959? There seems to be no majority view, no consensus. Our own estimate after weighing all the arguments on both sides, is still 18 to 19 million acres. This is about two million acres more than the national acreage allotment of 16 million plus 300,000 to provide for maintaining allotments of small growers, those with 10 acres or less. We've heard it estimated—as probably you have, also—that no more than 15 million acres may be planted. Others say 20 million would be a more realistic figure. Here's a quick check list of reasons which Washington officials of both viewpoints give to back up their forecasts:

• **Sixteen Million?**—On the side of 16 million acre, or less, plantings—along with a crop about equal to combined domestic and export demand . . .

■ Gins, crushers, feed and fertilizer dealers won't be willing to put up the cash for financing production under Plan B, fear that with prices so low there'd be too great a risk.

■ Many growers under Soil Bank acreage reserve for the past three seasons won't use their acreage allotment in 1959, or won't use all of it. Argument is that these men—mostly small growers and mostly in the Southeast—have already made the adjustment out of cotton farming. Many have sold off their equipment, taken town jobs, etc.

■ Some land in the acreage reserve during recent years will go into the new, better-paying (than previous) conservation reserve program.

■ Many growers are dangerously close to their breakeven point at present price levels, aren't likely to choose a program which would mean lower prices.

■ Nearly all high-yielding land is already in cotton production. A 40 percent increase in acreage would necessitate planting second-rate land; and the yield that could be obtained on this land wouldn't justify accepting a lower price on the entire farm's production.

■ Related to the above, the argument that because the additional 40 percent acreage will be lower-yielding than that already in production, the increase in production won't be proportional to the increase in acreage.

• **Or More Acres** — There's another side to the guessing game, however. Many officials—an even larger number—expect a higher level of production. And give these reasons.

■ Ginners, crushers, seed and fertilizers men will encourage the higher level of planting. That is, they will encourage growers to choose Plan B. Reason, of course, is larger volume—at the gin, for seed dealers, and for fertilizer dealers.

■ Big growers, especially in the Southwest and West, may choose Plan B and 40 percent more acreage in order to spread high fixed investment costs over a larger number of acres, thus reducing cost of production per pound of lint and seed. It's pointed out, too, just one of these large growers could offset the action of a dozen smaller growers who select Plan A, so far as the effect on total cotton production is concerned.

■ Many small, Southeast growers may pick Plan A also. The reasoning

in Washington is that lots of small growers have "surplus" family labor available for planting, cultivation, and picking. Therefore, there'd be no additional labor cost if acreage was increased by 40 percent. And, since relatively little fertilizer is used by these growers, there'd be very little added production cost. Only extra expense would be seed. As a result, some small growers can boost their plantings at less additional cost than can many larger growers.

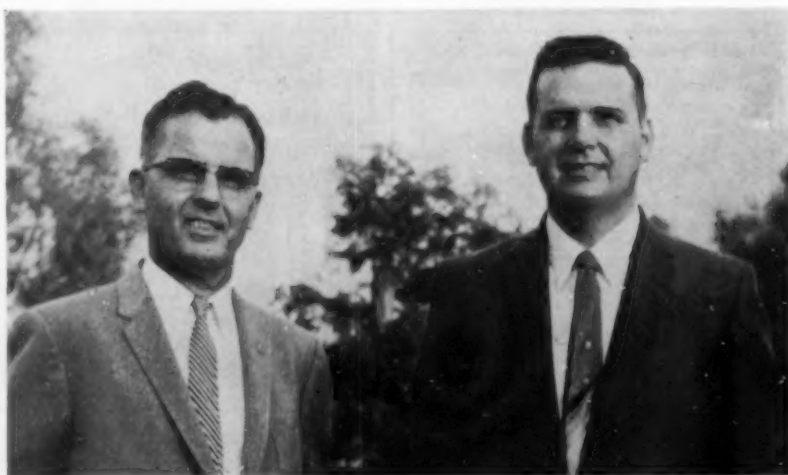
• **Ginners Are Key Men** — These are the arguments on both sides. We don't know the answer for sure, nor have we talked with anyone in our questioning who claims to know. Nevertheless, these considerations—both the pros and the cons—may be helpful in attempting to estimate planting and production in your own area under the new law.

One thing does appear certain: That as a ginner, your own actions may play a major role in the final determination.

• **What Congress Did** — Congressional wrap-up, some bills that did and didn't pass: P.L. 480 export program was extended for 18 months at the annual rate of \$1,500,000,000, with no mandatory barter provisions . . . bill requiring labeling of fabric content passed . . . reciprocal trade agreements act extension, for four-years, passed . . . Mexican National Labor Act extension, two-years, passed . . . measure to require USDA purchase and set-aside of cottonseed oil surplus resulting from operation of Plan B.

Valley Ginnings to Sept. 1

Texas Valley ginnings to Sept. 1 reached 382,265 bales, according to a weekly survey of the Valley Farm Bureau. County totals for this season are as follows: Cameron, 140,790, Hidalgo, 150,365, Willacy, 88,232, Starr, 2,878.



Hollandale Firm Promotes Officers

HOLLANDALE Seed & Delinting Co., Hollandale, Miss., has announced the promotion of two officers, shown here. P. S. Stovall, left, has been advanced from vice-president and general manager to executive vice-president and general manager. Lee W. Trawick, right, formerly sales manager, now is vice-president and sales manager. E. H. Winn, Sr., is president of the firm, and serves on the board of directors with Dr. E. H. Winn, Jr., R. T. Love, Rufus Turner and Stovall. The firm handles the processing and sale of cottonseed and other seeds and agricultural products.

■ Root Rot . . . 1958

C. B. SPENCER, agricultural director, Texas Cottonseed Crushers' Association, has written the following explanation of the unusually heavy 1958 cotton root rot damage in many areas:

Cotton root rot has caused lots of cotton plants to die paupers this year. This fungus disease is present in most lime soils and conditions were just right for it to kill cotton. Root rot is most deadly when the moisture level and temperatures are high. Also the damage is more severe when the soil or plants are in poor physical condition. Heavy rains during early July and scattered showers during the July-August period furnished the moisture. High, hot winds in late July and "dog" days during August furnished the heat. It was noted that early planted fields, with plants weakened by seedling diseases, had the most dead cotton. Irrigation during July and August is also partly responsible for dead spots in some fields.

Cotton root rot is the result of a complex situation, and prevention is difficult. Good farming practices, that keep the soil and plants in the best possible condition, are the most practical solution to the problem. Damage has been greatly reduced by using legumes or other soil improving crops in rotation ahead of cotton. The use of plant food, needed to help plants grow and fruit vigorously, also helps.

• High Plains Ginners Hold Elections

PLAINS GINNERS' ASSOCIATION were told that the use of braceros in harvesting operations this fall will be expensive, heard the importance of quality cotton stressed and learned that gin accidents on the South Plains last year cost more than \$2 million at the group's annual meeting Aug. 30 in Lubbock.

More than 250 persons attended the meeting and elected 12 directors and re-elected Earl Hobbs, New Deal, as president; Orville (Sleepy) Bailey, Anton, as vice-president; and Dixon White, Lubbock, as secretary-treasurer.

Ed Bush, executive vice-president of the Texas Cotton Ginners Association, Dallas, told the group that it will probably cost \$45 to \$50 each to get bracero workers to the Plains area this year.

"This is just getting too expensive, and we're discouraging the use of braceros this fall, at least in connection with gins," Bush said. Bush also reviewed the new farm legislation under which farmers will operate in 1950, and praised the group for their efforts in getting the bill passed to prevent a cut in cotton allotments.

George W. Pfeifferberger, executive vice-president of the Plains Cotton Growers, Inc. told the group that the popular concept of quality cotton as being only high grade and long staple "is quite erroneous."

In addition to the officers, the new directors elected include Jack Howell,

Les Wienke and Roy Forkner, Lubbock; E. B. Eeds, Plainview; Bill Thompson, Shallowater; Birgle Travis, Brownfield; Guy Nickels, Muleshoe; Drew Watkins, Sudan; Bill Smith, Ralls; and Weldon Martin, O'Donnell.

Waggoner Carr, Lubbock, speaker of the Texas House of Representatives, made the featured address at the ginners meeting.

Joins Cotton Office

Jerome Lake, a 1958 Cornell University graduate, has joined the USDA cotton classing office staff at Lubbock. He will work with ginners and other cotton industry sampling agents in West Texas.

• Seed Breeders Name Coker and Loden

LEADERS in cotton breeding were among those elected to office at the recent meeting of the National Council of Commercial Plant Breeders at St. Louis.

New officers are: president, Lewis M. Camp, research director of Pfister Associated Growers, Inc., Aurora, Ill.; first vice-president, Robert R. Coker, president, Coker's Pedigreed Seed Co., Hartsville, S.C.; second vice-president, Harold Loden, manager, Paymaster Farms, Plainview, Texas; secretary-treasurer, Raymond Coulter, Ferry-Morse Seed Co., Detroit, Mich.



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Watson STORMPROOF is early maturing, prolific, high quality cotton, moderate foliage. Excellent yield, stays in the burr, good lint per cent, top grade, 31/32 to 1-1/16 inch staple and high micronaire. A perfect stripping or hand snapping cotton.

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8-Cylinder H-540 ROILINE Unit—to 163 hp

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					600	800	1000	1200	1400	1600	1800	2000	2200	2400
H540	4½ x 4¼	8	540	454.... 900		68	87	105	122	138	151	164	173	178
H844	5¼ x 4¼	8	844	671.... 1500		113	145	177	205	231	255	274	290	299
F1300	6¾ x 7	6	1503	1165.... 650	134	176	214	230	<div> These are engine ratings on LP Gas... send for Power Chart with ratings for engines and complete power units operating on natural gas, LP Gas, and gasoline. </div>					
H2000	6¾ x 7	8	2004	1590.... 650	180	240	280	300						
L3000	6¾ x 7	12	3006	2420.... 650	275	360	435	460						
L3460	7¼ x 7	12	3468	2750.... 900	305	416	527	608	635 @ 1350 RPM					
L4000	7.54 x 7.5	12	4000	3110.... 900	345	471	593	685						

WAUKESHA MOTOR COMPANY



... under famous Waukesha Quality Control

ROILINE
ENGINES
(formerly Le Roi)

THE ADDITION of these well-known gas and gasoline engines to the Waukesha line... produced by Waukesha engine-builders and sold through the former Le Roi engine distributors... is of great importance to all users of internal combustion engine power.

The principal models of Le Roi gas and gasoline engines, formerly built by the Le Roi Division of the Westinghouse Airbrake Company, have been sold to the Waukesha Motor Company. The engines listed on the opposite page will be known as Waukesha "ROILINE" engines, and be built as bare engines, complete power units, and with components and accessories for special services.

Le Roi engines are widely used in the oil industry, and in various types of cotton ginning, compressor, generator, and pumping installations. They have been well-known in these fields and in other internal combustion engine applications for many years.

Waukesha has all rights to the manufacture and sale of these former Le Roi engine models and the service parts, patterns, and designs. Waukesha

will produce the V-8 models H-540 and H-844 high speed transport and industrial engines in the Waukesha plant. The remainder of the engine models, including the in-line Six and large V-8 and V-12 engines, will be manufactured in Waukesha's Climax Division plant at Clinton, Iowa. ROILINE engines, parts, and service will be available in all sections of the country to owners, operators, and purchasers of these fine engines, through the ROILINE distributor organization. OEM accounts normally serviced directly by the manufacturer will be handled through the Waukesha headquarters sales office.

This expansion of Waukesha's production will enable Waukesha to manufacture and supply internal combustion engine power for any requirement from 6 to 1200 horsepower in all normal speed ranges and for use with all standard fuels.

* The trade mark LE ROI is used under license from Westinghouse Airbrake Co., the trade mark owner.

SEE YOUR ROILINE DISTRIBUTOR

383

ARIZONA

Casa Grande
Engine Service Company

ARKANSAS

Paragould
Wonder State Manufacturing Co.

CALIFORNIA

Long Beach
Engine & Equipment Company

ILLINOIS

Centralia
John Nickell Company

LOUISIANA

Shreveport
Ingersoll Corporation

OHIO

Columbus
Cantwell Machinery Company

OKLAHOMA

Chickasha
Chickasha Gin & Mill Supply
Oklahoma City
Carson Machine & Supply Co.

PENNSYLVANIA

Pittsburgh
P. C. McKenzie Company

TEXAS

Houston
Southern Engine & Pump Co.
Lubbock
Farmers Supply Company
Odessa
General Machine & Supply Co.
Wichita Falls
Nortex Engine & Equipment Co.

UTAH

Salt Lake City
Transport Equipment Center

WYOMING

Casper
Emrick & Hill Engine & Equip. Co.

Waukesha, Wisconsin • New York • Tulsa • Los Angeles

After Seeing Council's Movie

Even a Yankee Girl Understands Cotton

by Helen Troy, Editorial Assistant,
The Cotton Gin and Oil Mill Press

NOW, even a Yankee can understand cotton! And what's more, we intend to write about it too!

All this marvelous spurt of knowledge

is courtesy of the Cotton Council International, in cooperation with USDA, who have come up with the answers to all our questions, and they've done it in

beautiful color, in layman's language against a background of soft music.

"Cotton—Nature's Wonder Fiber," the new promotional movie, is the reason we are so well informed today. Why, right there before our eyes was the seed before it goes into the ground. Then a soft pleasant voice answered all our questions—who—how—what—why.

The seed is followed in its development, from small plant to full bloom, then harvest, the ginning process, the finished bales going to the mills, then being unpacked—

The spinning of cotton into yarn, being carded, dyed into all shades of the rainbow,—some being treated for special uses, to resist rot, to repel water to keep pleats or creases forever—some to be made into terrycloth toweling, some will become chintz drapes, and some made into denim to stand the wear and tear of a little league baseball game—all right before our eyes.

We were the guests of the Kiwanis Club of McKinney, Texas, at their regular weekly meeting, when the attraction of the evening—the highlight of the meeting—was the showing of this new film. And we really enjoyed it—everyone there did. (The next time your wife complains about a dull PTA program, or you hear a low moan from a program chairman stuck for next week's program, be sure and suggest that they schedule a showing of this film, it is free, available in seven languages, and sure to be a hit with everyone attending, to say nothing of being informative.)

To see the over-all picture of what cotton is, and even more important what cotton can do, is amazing.

Come to think of it, we guess that the thing that impressed us the most is not what cotton can do, but what man can do to and with and for cotton. We're not much of a farmer, and even less of a mechanic, so the magnitude of the over-all business of cotton was what impresses us most.

Of course, cotton in all its aspects, amazes us, being Yankee, you know. We just never had any idea that there could be so much to this business of cotton—when to defoliate, how much is too much irrigation, watch out for bollworms, what happens at a gin, seeds go one way, lint another, classing, spinning, bleaching—and on and on. We knew cotton by the yard or by the dress, never mind how it got there.

Yes, the Cotton Council certainly deserves a great big vote of thanks, to say nothing of confidence for their film. "Cotton—Nature's Wonder Fiber," really is just that, but more than that, it is informative, beautiful and a wonderful evening's entertainment—a post card to the National Cotton Council, P. O. Box 9905, Memphis 12, Tenn., will set you up in business.

Southeastern Crushers Change Meeting Date

Southeastern Cottonseed Crushers' Association has announced a change in dates for the annual meeting. The convention now is scheduled for June 7-8-9, at The Clouds, Lookout Mountain, Tenn., instead of the previously-listed dates.

C. M. Scales, Atlanta, secretary, said that the change was made to avoid a conflict with the meeting of Southeastern Peanut Association.

**Now! Add Speed...Capacity
Economy and Efficiency**

TO YOUR ELEVATOR LEES...

with the NEW




This NEW DESIGN is 6 ways better!

1. High tapered sides provide scoop-action loading, avoiding spillage and packing.
2. Correctly positioned lip, for smooth pick-up and efficient discharge.
3. Projection-welded, serrated flanges assure maximum strength at crucial locations.
4. Rounded bottom, for fast, clean discharge. Eliminates cutting of belt.
5. Tapered sides permit nesting, to economize on storage, shipping.
6. Properly located bolt holes for perfect loading and discharge.

The Winona Bucket is designed to do a better, faster, more efficient job for you! That is the "Success Story" of this amazing bucket as reported by its users.

With the Winona, you get high speed pick-up and discharge without overworking your leg. Buckets can be spaced on closest centers and operate equally well at high or low speeds, for all-around use. The scientific Winona contour—with its high tapered sides, rounded bottom and high lip—gives you improved pick-up and greater load carrying ability, plus all-out discharge without pulling back any of the load.

Available in all sizes; the new Winona Elevator Bucket is your best answer, by far, to the problem of handling peak loads and providing smooth, efficient operation of elevator.

The new Winona Bucket design is the direct result of many years of research and experience... plus the specific suggestions of hundreds of elevator operators and managers.

WRITE FOR ILLUSTRATED BROCHURE.



Screw Conveyor Corporation

105 HOFFMAN STREET • HAMMOND, INDIANA

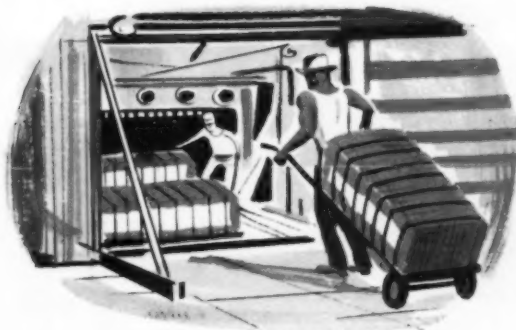
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Experience, facilities, location . . . plus a genuine interest and first-hand knowledge of the cotton man's problems and objectives . . . these combine to make Republic National Bank a leader in cotton financing. Whatever your requirements, it pays to talk them over with the cotton experts at Republic.

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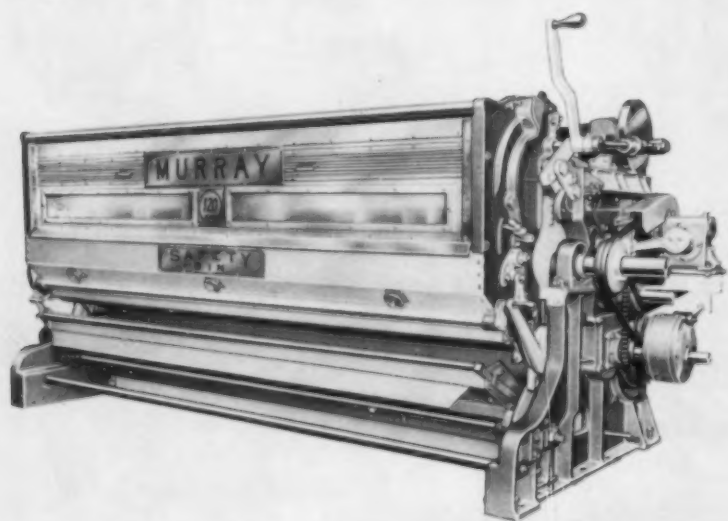
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\$90,000,000
LARGEST
IN THE SOUTH

New Developments in Cotton Gin Machinery

The information and statements appearing in this department are furnished by the manufacturer of the equipment.



New 120-saw gin introduced by The Murray Co. of Texas is shown here

In conjunction with an open house at the New Home Co-op Gin, New Home, Texas, on Sept. 2, The Murray Co. of Texas, Inc. introduced the world's first 120-saw safety gin.

With cotton in its present competitive position, the need for good quality cotton in this country is very apparent, the manufacturer points out. The quality must, to a great extent, come from the processing. And with the shorter ginning season, the processing must be fast enough to handle the volume, thus eliminating some of the damage done by the elements if the cotton is left in the field too long.

A total of 10 dozen saws per stand in this unit affords the added capacity needed to gin the cotton faster than was possible heretofore, with a positive increase in usable capacity up to 40 percent more than the present 90-saw gin stand. The fully automatic features of the 120-saw unit add to the expediency of the process. Gin stands can be furnished with electric automatic front control which can be operated from individual gins, or from a master panel.

This gin results from years of planning, development, and research. This continued research, and a keen desire to produce and furnish cotton ginning machinery of the most advanced design, enabled Murray to be the first manufacturer to incorporate 10 dozen (full size 12-inch diameter) saws into the Safety Gin. Unequaled in capacity, it cleans seed perfectly with extra loose roll, while ginning at all rates of feed and regardless of size of seed.

While this new gin has 33-1/3 percent

more saws than the 90-saw Safety Gin, friction-free, stainless steel roll box, which is 21-9/16 inches longer, and the much longer, uninterrupted working space in roll box cause this new gin to handle an average of 40 percent more capacity in lint per hour with the ginning roll at same density.

This new 120-saw gin has actually been operated under tests, using various types of seed cotton, at a ginning rate of 4-1/2 bales per stand per hour. The company does not claim such capacity can, or should be used under field conditions, but they do claim capacity under field conditions of approximately three bales per stand per hour. This is one-third under maximum capacity.

The 120-saw Safety Gin has all the fine proven features of the 90-saw gin, including the now famous reciprocating lint cleaning device.

Three 120-saw gins will replace four 80- or four 90-saw gins, with no increase in space required, allowing greater ginning capacity at a minimum expense.

Four 120-saw gins will replace five 80- or five 90-saw gins with no increase in space required.

A lesser number of gins will have more capacity for ginning more cotton faster than ever before, and yet retaining the same fine, proven quality performance.

Standard centers for direct-coupled gins are 10'-0".

Standard centers for individually driven, wide-set gins are 14'-0".

"Soapstock" Pays

(Continued from Page 18)

verted an old butane tank into a horizontal mixer with long, interrupted paddles rotating inside to fold the mix together against baffles on the inner walls. The experimenters, cattlemen and mill staffers, also saw that the blend could pass into overflow tanks the effervescence from the main mix tank.

The converted HVO now is piped about 200 yards to the Producers' feed mixing mill outside the cottonseed oil milling plant, where it is measured into the ration as 12 percent of the rations volume and about two percent of the actual total fat. Other ingredients are 10 percent meal, 24.25 percent cottonseed hulls, three percent dehydrated alfalfa, 50 percent barley and three-fourths percent minerals.

• **Both Are Pleased**—Cattlemen like the idea of a year-round supply of fat at about a penny a pound. They also are pleased because Producers feed mill adds needed minerals and drugs to the ration. This practice has reduced death losses among their feedlot cattle to a minimum and has helped to keep their cattle healthy and gaining.

And, Producers is pleased to be converting some 300,000 pounds of soapstock into beef at its mill door.

Storage Capacity Increased

Lubbock Cotton Exchange lists the following new cotton warehouse construction on the South Plains: One new warehouse at Tulia by North Plains Storage; six new warehouses at Farmers Co-op Compress, Lubbock; three by Plains Cotton Co-op Association in Lubbock; one at Whiteface by Producers Warehouse; one at Seagraves by Texas Compress; two added at Bovina by Western Warehouse and three being built at Abernathy by the same company; and three at Floydada by Panhandle Compress. The new construction added to existing facilities will make storage capacity of 1,500,000 bales on the South Plains.

Filters Made of Linters

Ninety-five percent of all cigarette filters are made of cotton linters, according to W. C. Manley, Jr., Memphis. In a current letter on linters, Manley says: "We should produce 1,389,996 bales of linters this season . . . and with more cottonseed in sight the following season, many manufacturers will probably come back to their old standby, cotton linters."

Cotton Being Stored

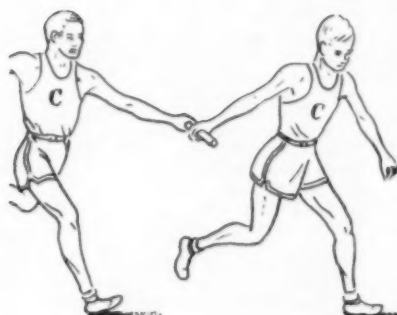
Sixty percent of the cotton ginned to date in Texas' Lower Rio Grande Valley and 60 to 90 percent in some other South Texas areas is reported going into the federal loan program. (See The Press, Aug. 23, "The Cotton Belt We Gave Away.")

India Exporting Oilseeds

India is permitting exports of rapeseed and mustard seed oils for the first time since 1956. USDA adds that this policy is in line with the earlier announcement of export quotas for peanut and sesame seed oil.



The Anchor Man on a relay team takes the last leg and completes the race.



Your cotton warehouseman runs the "home stretch" in marketing your cotton. His job is to complete the safe shipment of every bale to spinners throughout the world . . .

HIS SERVICE PROVIDES:

Safe storage that protects from loss and damage

Authentic samples and positive bale-identification that assure delivery of each specific bale with the precise fiber qualities desired

Compression that permits minimum transportation costs

Negotiable warehouse receipts that provide ready financing — expedite sale and delivery

Applied "know how" that speeds delivery to carrier and arrival at destination

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COTTON WAREHOUSE ASSOCIATION**
MEMPHIS, TENNESSEE

Classified Advertising

RATES AND CLOSING DATES: Ten cents per word per insertion. Include your firm name and address in making word count. Minimum charge \$2.00. Copy must be in our hands by Thursday morning of week of issue. Please write plainly.

Oil Mill Equipment for Sale

FOR SALE—New V. D. Anderson Expeller parts. New Fairbanks-Morse 16" x 12", 80,000 lbs., suspension bearing pipe lever hopper scale. Oil refining equipment, oil screening tank, Vogt oil chiller, 42", 36", and 30" filter presses, York ammonia compressors, Carter gyrator screen, scale tanks, complete with Toledo scales, Richardson scales, meal coolers, Roots-Connorsville and Hoffman blowers, bucket elevator legs, pumps, and motors. Contact Lee Atherton of Archer-Daniels-Midland Co., Minneapolis, Minnesota.

FOR SALE—Filter presses, screening tanks, single and twin motor Anderson Super Duo expellers, 141-saw linters, baling presses, car unloader, Bauer #199 seed cleaners, Bauer #153 and 403 separating units, bar and disc hullers, 72" and 85" stack cookers, 72" 4-hi stack cookers for French expellers with enclosed drive, 42" and 60" rolls, boilers, hydraulic press room equipment.—V. A. Lessor & Co., P. O. Box 108, Fort Worth, Texas.

OIL MILL EQUIPMENT FOR SALE—Rebuilt twin motor Anderson high speed expellers, French screw presses, stack cookers, meal coolers, fourteen inch conditioners, filter presses, oil screening tanks, complete modern prepressing or single press expeller mills.—Fittock & Associates, Glen Riddle, Pennsylvania.

FOR SALE—French vegetable oil earth extraction unit, 20 ton capacity complete with still, filter presses, pumps, heat exchangers, condensers, evaporators, tanks, motors, and electrical starting equipment. Purchased new and installed in 1949. Good condition. Contact Lee Atherton, Archer-Daniels-Midland Co., Minneapolis 2, Minn.

INSPECTIONS and appraisal. Dismantle and installation.—Oscar V. Shultz, Industrial Engineering, Phone BUTler 9-2172, P. O. Box 357, Grapevine, Texas.

FOR SALE—2 French 4-cage screw presses 9" extensions, 75 h.p. motors, French screening tank. Filter presses, French 72" cooker Frencro Drive-72" cooker Hypoid Drive, D-K 5-high 90" all-steel cooker. Carver 141-saw linters. Bauer 199 seed cleaner. Bauer 198 hull beater. Butters 141-saw machines. Carver 48" bar huller. 36" attrition mills. No. 8 cake breaker. 2 single-box, up-packing, all-steel linter presses. Electric motors, starting boxes and switches. Steel and boiler reel.—Sproles & Cook Machinery Co., Inc., 159 Howell St., Dallas, Texas. Telephone RI-7-5958.

Gin Equipment for Sale

FOR SALE—First class 4-80 modern plant — to appreciate this real bargain come see it in operation now.—Calvin North, Mgr., Benavides Mill & Gin Company, Benavides, Texas.

FOR SALE—One complete Murray gin. Perfect condition. Will sell to be moved or to be run. Due to manager's health, must sell immediately. \$8,000 for complete gin and buildings. Located 25 miles east of Dallas, Farm Road 7. Write or call Vernon Schrade, CHurchill 5-3304 or CHurchill 5-3347, Rowlett, Texas.

FOR SALE

FRENCH OIL MILL:

Vertical 4-section, 2-compartment cooker (Digester), approximately 7' diameter x 8' high; power agitator with large Falk gear reducer; Allis-Chalmers 40 h.p. enclosed line start motor, 220-440/60/3/1770; French hydraulic 5,000 pound grease press, 30" inside diameter; union steam driven hydraulic 10 x 1 1/4 x 12 pump. Price \$6,000 before removal.

HERMAN E. BETINSKY

Phone: NOrmandy 5-2400
36th St. and River Rd. Camden, N.J.

SPECIAL BARGAINS—5-80 saw F-3 brush gins, excellent condition. 4-80 saw late model Murray glass front gins. Steel bur machines: 1-14' Model 500 Continental, damaged some by fire, \$800.00. One right hand and one left hand 14' steel Hardwicke-Etters. 1-14' Murray, 14' and 10' Lummus. Steel cleaners: 4-cylinder Continental incline, 5- and 7-cylinder Hardwicke-Etters, 6- and 12-cylinder Stacy, 4-cylinder 8' and 12-unit Lummus Thermo, 3-cylinder Mitchell and Murray air line, Continental and Murray lint cleaners. 52" Stacy separator. Mitchell convertible and super units in 60" and 66" lengths. Six stand Lummus conveyor distributor. Lummus and Continental press pumps, 12', 15' and 16', 9" screw elevators. New Government type tower driers, Stacy Murray and Hardwicke-Etters heaters. New and used fans, belting, conveyor trough and a general line of transmission equipment. Electric and gas power units. For your largest, oldest and most reliable source of used and reconditioned gin machinery, contact us. Call us regarding any machinery or complete gin plants which you have for sale or trade.—R. B. Strickland & Co., 13-A Hackberry St., Phone Day or Night, PL-2-8141, Waco, Texas.

FOR SALE—5 Continental and 4 Murray lint cleaners. Good condition. Bargain. Suitable for 80 or 90 saw gins. Write Lint Cleaners, P. O. Box 342, Leland, Mississippi.

FOR SALE—Heavy duty Gullet steel press, like new. Complete with pump, trampler, condenser, etc., and brand new extra ram.—Paul Falkenstein, P. O. Box 1502, Phone FAirview 5-7419, Bakersfield California.

TWO MODERN gins for sale, machinery only, to be moved, both equipped with drier and lint cleaners, priced very reasonably. Also several extra pieces of modern machinery such as dropers, condensers, packers. Contact Jim Hall, P. O. Box 751, Phone Riverside 1-1393, Dallas, Texas.

Equipment Wanted

WANTED TO BUY—Truck scales 20', or longer, any make.—Texas Waste Materials, Box 5267, Corpus Christi, Texas.

Power Units and Miscellaneous

FOR THE LARGEST STOCK of good, clean used gas or diesel engines in Texas, always see Stewart & Stevenson Services first. Contact your nearest branch.

FOR SALE—(1) 150 HP New GE Slipring Motor, 3/60/440/720 RPM, Type M, Ball Bearing, Open Dripproof, \$3,875.00 Net.
(2) 200 HP New Master Slipring Motor, 3/60/440/700 RPM, Ball Bearing, Open Dripproof, \$5,130.00. —W. M. SMITH ELECTRIC CO., 3200 Grand Ave., Dallas, Texas.

SEE US for good used re-built engines, MM parts, belt lace, and Seal-Skin belt dressing.—Fort Worth Machinery Company, (Rear) 913 East Berry Street, Fort Worth, Texas.

FOR SALE—One Le Roi L3000-RXISV 12-cylinder 300-350 h.p. Cotton gin equipped, guaranteed in operating condition. Priced low to move. One General Motors diesel twin-6-cylinder, cotton gin equipped, guaranteed in operating condition—300 h.p. @ 1800 RPM. Priced low to move. One Minneapolis-Moline Twin 6 Model 1210-12A, cotton gin equipped, guaranteed in operating condition—200 h.p. Priced low to move.—W. M. Smith Electric Company, Hamilton 8-4606, 3200 Grand Avenue, Dallas Texas.

FOR SALE—9' x 34' 20-ton modern Howe truck scale. Excellent condition. Wood deck. Price \$1,250.—J. C. Noblin, P. O. Box 53, Phone 217, Quinton, Oklahoma.

FOR SALE—New Century 1800 RPM, 3-phase electric motors: one 5 h.p., \$90; two 3 h.p., \$50; one 1 h.p., \$40; one 5 h.p., used, \$50; one 3 h.p., 850 RPM, \$35. Many various single and 3-phase motors 1 to 10 h.p. Let us help you with your motor problems. We buy, sell, rent and repair all models, makes and types of jacks.—Southwestern Jack Service, 8399 Commerce Street, Phone: RI 8-2644, Dallas, Texas.

FOR SALE—75 h.p. GE Type WT 56, 220 volt, 180 amp., 3-phase, 860 RPM motor with starters and sheave. Also Continental drier oil burner, Model 500, series 984.—Swint Seed & Grain Co., Orchard Hill, Georgia.

'59 Maid of Cotton Contest Opens

THE 1959 MAID OF COTTON will go around the world. This is revealed by the National Cotton Council in announcing the official opening of the twenty-first annual contest.

Tentative tour plans call for stops in Australia and the Orient, returning via Europe. The 1959 representative will be the first Maid of Cotton to visit the Far East.

The round-the-world journey follows the Maid's domestic tour of 30 major cities in the U.S. and Canada. and is scheduled to last approximately two months.

Finals of the 1959 Maid of Cotton contest will be held in Memphis, Dec. 29-30. After her selection, the Maid will spend a month in New York. She will be outfitted in a complete all-cotton wardrobe created by more than 40 of the nation's top high fashion designers. The first showing of her new wardrobe will take place on Jan. 21 at the Waldorf-Astoria.

Cotton Furniture Awards Given Nine Designers

Nine Young American designers shared \$6,600 in cash awards offered by the cotton industry for the best original furniture designs of cotton and spring construction. They were selected by a jury of homefurnishings authorities as the most outstanding from a field of 254 entries in the National Cotton Batting Institute's first Furniture Design Awards competition. Six prizes of \$1,100 each were awarded.

Winning designers, some of whom collaborated, include Robert S. Alexander, Michigan State University; Alex Cranstoun, Bartholomew Russo and Mario Dal Fabbro, Paul McCobb Designs Associates, New York; William P. Katavolos, independent designer, New York; Otto Kolb of Westport, Conn., former design instructor in Zurich, Switzerland; David Lincoln Rowland, also an independent New York designer; Burton Tysinger and John Stork, Design Associates, New York City.

Safford Valley Growers Organize Cooperative

Producers' Gin Co., Safford, Ariz., on Sept. 1 became Safford Valley Cotton Growers' Co-op, Inc. The organization includes the oil mill and five gins. Some 245 members farm about 15,000 acres.

O. Rawson is general manager and assistant secretary-treasurer. Other officers are M. J. Ferguson, president; Walter Foote, vice-president; Len Matice, secretary-treasurer; and directors, J. R. Pursley, Clyde Kempton, Ned Daley, D. S. Phillips, Ted Lee and Burns Marshall.

Lee Farris, Ginner, Dies

Lee A. Farris, owner and manager of Lee A. Farris & Son Gin, Huntsville, Texas, died recently.

C. B. SPENCER, agricultural director, Texas Cottonseed Crushers' Association, will address agricultural groups at Shreveport, Sept. 11, and Lubbock, Sept. 22.

**Let Others
Choose Up Verbs
To Talk to Machines . . .**

We'll Take a Blonde Any Day

Man is learning how to talk to machines, we are told. This may encourage the scientists and such, but it merely worries us.

Let others talk to the mechanical monsters! As for us, we're just going to keep on trying to learn how to transmit to other human beings the occasional thoughts that creep into our cranium.

Here's what's bothering us—an announcement from Remington Rand which says, in part:

"A better way has been found for man to communicate with the electronic 'brains' which have taken over much of his work.

"The U.S. Air Force, and Remington Rand Division of Sperry Rand Corp. have jointly developed a method for using a limited vocabulary of English verbs to instruct business type computers.

"This means that the average business man can soon refer his accounting and computational needs to the machines in almost his own terms, without having to learn or cope with the complex language of the machine.

"The new method, known as the Air Materiel Command Automatic Compiler, or AIMACO, will initially use 30 English verbs, and has flexibility of enlargement to additional verbs as circumstances dictate."

Learn to talk to machines?—shucks, we've been doing it for years, and using good, strong verbs. Some of our finest conversations were with the electric edger that shocked us, with a tire on a Model T, and the time we were fixing the bathroom plumbing and it erupted just as the guests arrived. As a matter of fact, we're a lot better as a conversationalist with machines than we are as operator of the contraptions.

"Thirty verbs," the announcement says. "What verbs?" Will they include "slud"—one of our favorites, as used by Dizzy Dean in saying "he slud safely into second"? How about "love," "eat," "sleep," "guzzle,"—and lots of other nice, useful verbs we can think of? Who's going to pick the verbs, anyway? We'd just like to be on the committee.

On second thought, we don't want any part of selecting the verbs or talking to the machines, either.

As for us, we'll take the old-fashioned way. For example, if we've got any words that need to be transmitted to a machine, we're perfectly content to say them to a stenographer—a blonde, 35-25-35, just out of business college and a good listener. She may not know many words, but you'd be surprised how much more she inspires us (when she sits down with a notebook and neatly crossed legs) than any machine we ever saw.—WBM.



He Knows His Tomatoes

J. E. MOSES, Atlanta, is proving that he has a green thumb by growing a fine crop of tomatoes in his backyard. The retired secretary-treasurer of Georgia Cottonseed Crushers' Association has plenty of experience in agriculture to help him in his gardening. He served as National Cottonseed Products Association field representative, and before that as an Extension Service leader throughout the Southeast.

11,790,000 Bales Forecast

A crop of 11,790,000 bales was indicated on Sept. 1 by reports received by Geo. H. McFadden & Bros., Inc., cotton firm. Supima production was estimated at 85,000 bales. Central and Eastern Belt conditions improved during September, there was some decline in the Southwest and little change in the Far West.

Plains Growers

(Continued from Page 16)

sarily mean a cheap price, but a price at which cotton can regain and retain the position this splendid fiber deserves.

"As a major supplier of raw material, your future must parallel that of your customers. Over the long term, your prosperity must be equated with that of manufacturers.

"If the spinner and weaver cannot get the kind of cotton they need, in the right quantity to remain competitive with other materials and textile fibers, cotton's kingdom will topple," Reid said.

George W. Pfeifferberger, executive vice-president, reported that the organization had a total retained earnings at the close of its 1957 fiscal year of \$162,857.19, compared with \$107,434.21 at the close of the previous year. The PCG has an operating budget of more than \$120,000 for the 1958-59 fiscal year.

National Seed Storage Lab Nears Completion

A National Seed Storage Laboratory, now being completed at Fort Collins, Colo., will soon house the world's greatest pool of seeds for research purposes.

The laboratory, built by USDA, will be a repository for valuable breeding stocks gathered from all parts of the world in 60 years of plant exploration. Many of these are wild relatives or primitive varieties of some major farm crops. Among them may be found many useful characteristics that could be bred into more highly-developed crops—characteristics such as disease and insect resistance, cold hardiness, heat tolerance, or superior growth qualities.

Plant breeders attempting to improve commercial crops will be able to draw upon this rich source of germ plasm for plant characteristics that they are seeking. The seeds will be kept under temperature and humidity conditions that will keep them alive as long as possible, in some cases for several decades. Arrangements will be made to plant and reproduce the seed as necessary.

Any potentially valuable seeds accepted from private sources for storage in the National Seed Storage Laboratory will become the property of the U.S. government, but they will be made available to qualified plant breeders without charge.

Peanut and Soybean Bulletins

"Soybean Insects and Their Control" and "Peanuts in South Carolina" are the titles of two new publications available from Clemson Agricultural College, Clemson, S.C.

Quality Group Meets

Members of the Beltwide Cotton Quality Committee of the National Cotton Council met in Memphis on Sept. 3.

FAN DRUM

drying and cleaning through blow-thru rod-grids, for maximum moisture and trash removal.

**HINCKLEY
GIN SUPPLY CO.**
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Effect of Weed Control on Quality of Mechanically-Harvested Cotton

ONLY TWO PERCENT of the cotton grown in the Southeastern U.S. is harvested mechanically*. Among the factors responsible for this lack of acceptance of mechanization the problem of weed control stands out as one of the most important. Frequently, picker operators in this area are forced to let their machines stand idle because grass in the cotton will cause serious quality losses. Farmers are using methods of weed control which have usually been satisfactory for hand picking, but these methods do not give control that is adequate for machine picking.

The development of a weed control program that will be suitable for mechanical harvesting of cotton is a problem which involves economic as well as agronomic and engineering considerations. It would be possible to maintain completely clean fields if one could pay the price. However, with the means that are available now, this price is out of the question. The task of the research worker, then, is to develop means which will enable the farmer to invest his money in the most economical method of weed control, economical in the sense that he receives maximum profit from the marketed cotton.

The researcher might well ask these two questions: (1) How well must he control weeds in order to achieve good quality cotton from a mechanical cotton harvester? and (2) What weed control methods will give satisfactory control with minimum cost? Research is now under way at North Carolina State College which will help to provide the answers to these questions.

The first phase of the study was begun in 1956. An experiment was conducted during that year to define some of the effects of weed control on the quality of mechanically harvested cotton. In that experiment, known densities of crabgrass were established and maintained in cotton to represent a very wide range of weed control effectiveness. The cotton from this experiment was harvested mechanically and analyzed for grass content before ginning, trash content after ginning, grade after ginning, and spinning performance after ginning. The correlations between the above variables and the quantity

* Street, James H., The New Revolution in the Cotton Economy, The University of North Carolina Press, Chapel Hill, N.C., 1957.

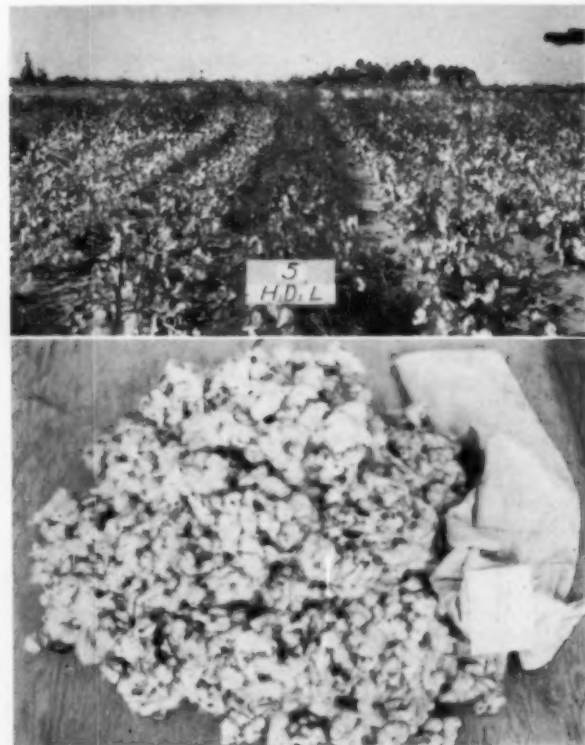
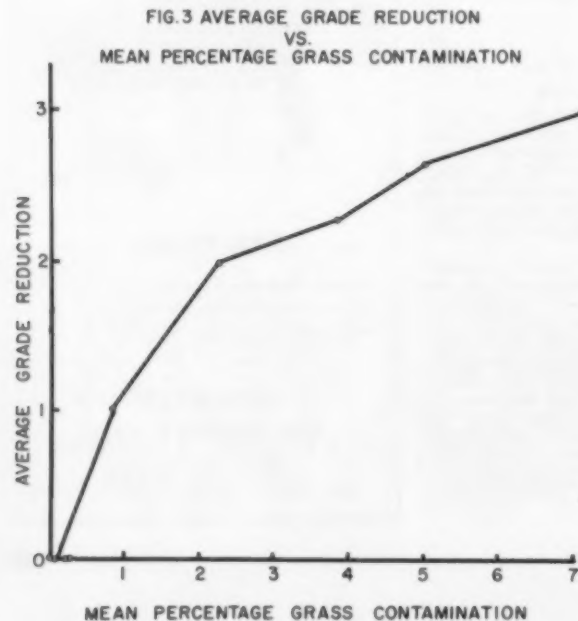
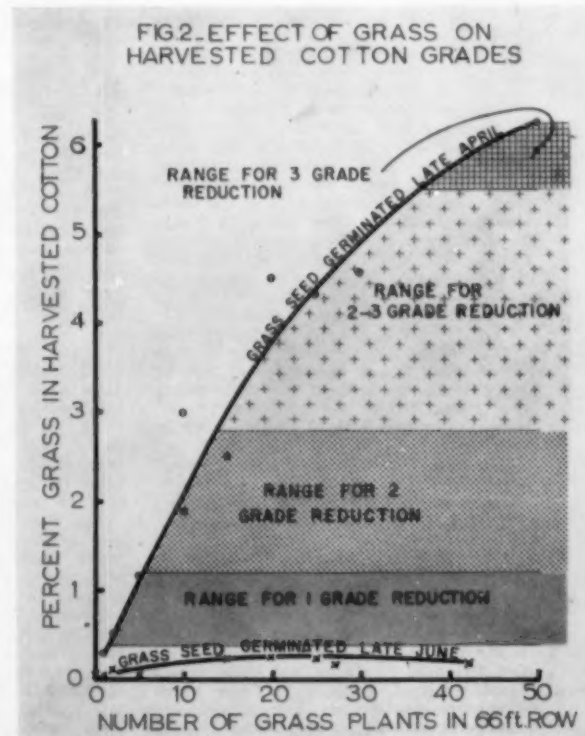


Figure 1. Row of cotton, top, containing 25 plants of crabgrass that germinated late April and a sample of machine-picked cotton from that row. Below, picture of row taken Oct. 10.



By THOMAS H. GARNER, HENRY D. BOWEN and JAMES A. LUSCOMBE

of grass in the field were then established.

• **Scope of Experiment** — The cotton and grass plants were grown in plots, each plot consisting of one row 66 feet long. The following numbers of crabgrass plants were grown in these rows: 0, 1, 2, 5, 10, 15, 20, 25, 30, and 50. Each of the above mentioned grass densities was established at three different periods during the growing season: (1) at the time the cotton was planted, (2) at lay-by time, and (3) late in the season around Aug. 1. Four replications of the above test were harvested early (Sept. 14, 1956) and six were harvested late (Oct. 13, 1956).

Crabgrass was used exclusively in this experiment for two reasons (1) to avoid the variability that would result if several weeds were employed and (2) crabgrass is generally accepted to be the most prevalent weed in the North Carolina area.

A one-row mounted picker of the high drum type was employed for the harvest. This picker was equipped with barbed spindles. Arrangements were made whereby the samples from each row could be bagged individually and identified.

Figure 1 shows the condition of the cotton and grass on Oct. 10, 1956, three days prior to the late harvesting date. This figure also shows the condition of the cotton harvested from the row in the center.

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• **Analysis of Seed Cotton** — The samples of cotton from the first harvest were analyzed very carefully for grass content. Subsamples were taken from each sample and the grass was picked from them by hand. The grass removed was stratified according to length (0-1 inches, 1 to 3 inches and greater than 3 inches) and portion of the plant (head, stem, or leaf). The quantity of this grass was measured by weighing. Utilizing the known grass weights and the known cotton weights the percentage grass was calculated.

$$\text{percentage grass} = \frac{\text{grass weight} \times 100}{\text{cotton weight}}$$

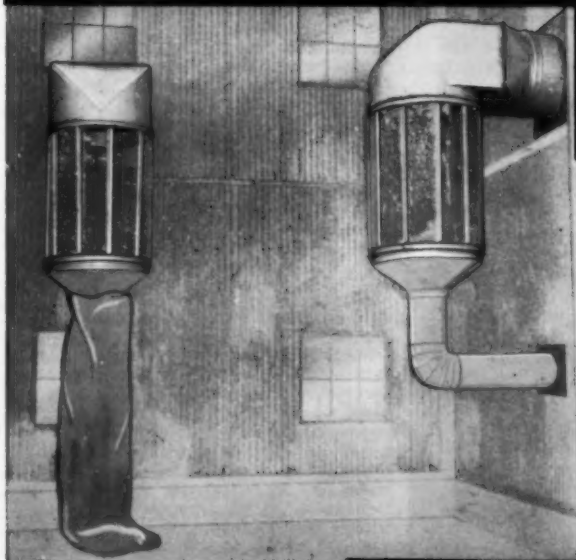
• **Analysis of Lint Cotton** — After the first analysis of the cotton had been

completed the samples were pooled to make up samples large enough for gin tests. The samples were pooled according to the quantity of grass they contained. Twelve samples were made up for the gin tests, each larger sample representing a different range of grass contamination.

These larger samples were ginned at the Southeastern Cotton Ginning Laboratory, Clemson, S.C., on an experimental 20-saw gin. Each gin test was replicated three times. Samples were extracted from the ginned cotton for classification and Shirley Analyzer examinations. Classification of the samples was done by the Raleigh Committee of the Board of Cotton Examiners.

Samples of the lint cotton were also subjected to spinning performance

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tests by the Cotton Division, Agricultural Marketing Service, USDA, Washington.

RESULTS

The results obtained from this first experiment are summarized graphically in Figures 2 and 3. These results refer only to the cotton that was harvested in September.

Figure 2 shows how the quality of grass in the harvested cotton varies with the amount of grass that is in the field.

In Figure 2 the quantity of grass in the field is expressed in terms of number of plants in a given distance (66 feet). Here it is noted that grass that germinated early, along with the cotton, produced a high degree of contamination. From two to five plants of grass in 66 feet were sufficient to cause the cotton to be reduced one grade because of grass. The tendency for the curve to level off with the higher densities of grass is probably explained by the fact that this grass could not grow as large because of competition with other plants.

Figure 2 also shows that grass which germinated at around lay-by time did not reach sufficient size to cause grade reductions. However, the margin of safety was very close. An analysis of the cotton harvested in October indicated that grass which germinated in late June or early July would cause as much as one grade reduction if late harvesting was practiced. Grass germinating in early August did not cause serious contamination of the cotton in either the early or late harvest during the 1956 tests.

In Figure 3 the influence of grass contamination on the grade of the cotton is illustrated. This illustration closely indicates that if the seed cotton contains a small amount of grass it will be reduced in grade. Most of this cotton was reduced from low middling or strict good ordinary and it is expected that a lesser quantity of grass would be required to reduce the grade of higher quality cottons.

The results of the spinning perform-

ance tests fell in line with the results from the classers examinations. The cotton that was reduced in grade because of grass produced a higher percentage of manufacturing waste and had lower yarn strength and appearance indexes.

CONCLUSIONS

Proper weed control is mandatory if mechanical cotton harvesters are to be utilized. The study reported herein was directed toward defining more precisely what is meant by proper weed control. Based on one year's field tests the following conclusions may be drawn.

■ 1. Only a few plants of grass that germinated early along with the cotton were required to reduce the quality of mechanically harvested cotton. One large plant of crabgrass in approximately 20 feet of cotton row caused a one grade reduction.

■ 2. Lint cotton that is contaminated with grass gave a higher percentage of manufacturing waste and had a lower yarn strength and appearance index when subjected to spinning performance tests.

■ 3. Grass that germinated after late June did not cause grade reductions even in the higher densities when early harvesting was practiced. A survey conducted in 1957 (a very wet year), however, indicated that grass which emerged as late as Aug. 1 reached a size sufficient to cause serious grass contamination.

■ 4. Grass that germinated in late June caused one grade reduction when late harvesting was practiced.

Future work in this study will be directed toward determining more precisely the relationship between amount of grass in the field and quality of grass in the harvested cotton within the range for one grade reduction. This will be done for both early and late grass.

The establishment of quantitative information of this type will eventually

make possible the selection of a weed control method which is the most economical not just from the standpoint of its first cost but also with consideration to its contribution to the value of the lint cotton.

\$1 Million for Schools

Procter and Gamble Aids Education

Procter and Gamble, Cincinnati, has contributed more than \$300,000 in unrestricted gifts to 10 major national universities; and 39 state associations of colleges with memberships of 467 smaller institutions.

The gifts are part of Procter & Gamble's over-all aid-to-higher education program which amounts to nearly \$1 million annually.

Howard Morgens, president of Procter & Gamble, said unrestricted grants of \$20,000 each were made to 10 major universities which train students from throughout the U.S. and return many of them to smaller colleges to teach. The universities are Columbia, Cornell, Chicago, Harvard, Massachusetts Institute of Technology, Northwestern, Pennsylvania, Princeton, Stamford and Yale. Funds contributed may be used by each institution as it sees fit.

The associations of smaller, independent colleges in all parts of the country will receive \$110,000 to be divided among their member institutions. These colleges enroll some 400,000 students.


Procter & Gamble also provides scholarships for 240 men and women in 52 colleges and universities, fellowships and grants at independent and tax-supported schools, and other grants in the field of higher education. P&G subsidiary companies in both Canada and England also conduct programs for support of higher education.

In announcing this year's program of gifts Morgens said it was especially important that industry give all possible assistance to the nation's system of colleges and universities.

"The recent scientific breakthroughs which have shaken the world have also spurred a great interest in education," he declared.

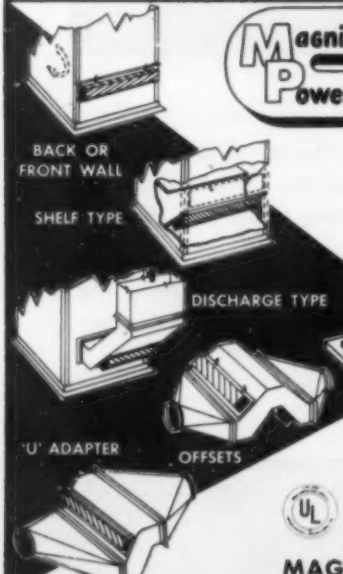
"As a direct beneficiary of the fruits of higher education—both in increased standards of living made possible through education and also through employment of college-trained people—Procter & Gamble joins with other corporations in contributing toward the education of our young people. "We believe that through such programs the supply of teachers, scientists and doctors will be improved, along with the supply of managers for the institutions on which this country depends," Morgens continued.

Procter & Gamble's annual program of aid-to-education in the U.S. alone consists of: \$400,000 for scholarships to 240 students in 52 colleges and universities; \$110,000 for postgraduate fellowships; \$80,000 in contributions to the National Fund for Medical Education, the United Negro College Fund, and other special grants; \$110,000 for distribution among member colleges of the 39 state and regional associations of small and medium size institutions; \$200,000 to 10 leading national universities on the basis of \$20,000 each.



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Delta Ginners Attend School at Greenville

TWO OF THE LEADERS on the program of the Delta Ginners' School, shown here, were O. C. Carr, Jr., chairman of the sponsoring committee; and William B. Harbour, Extension ginning specialist in Mississippi. One hundred and fifty ginners attended the school Sept. 5 at Greenville, Miss., which was sponsored by the Delta Council Ginning Improvement Committee, and Mississippi Extension Service. Speakers included Ben Tipton, Woodside Mills, Greenville, S.C.; C. M. Merkel, R. A. Montgomery and Clyde Griffin of U.S. Ginning Laboratory, Stoneville; F. L. Gerdes, ginning consultant, Leland; Harbour; and Herschel McRae, National Cotton Council, Memphis. Hosts for a noon barbecue were: Continental Gin Co., The Murray Co. of Texas, Inc., Lummus Cotton Gin Co., Hardwicke-Etter Co., Moss-Gordin Lint Cleaner Co., and John E. Mitchell Co.

Textile Executive Praises Recent Cotton Action

The U.S. Government's recently revised cotton policy was praised by an American textile executive in a speech to the board of directors of the International Federation of Cotton and Allied Textile Industries meeting in Stockholm, Sweden.

W. J. Erwin, president of Dan River Mills, Inc., Danville, Va., told the world group the congressional action was "a highly significant gain."

"For the first time since government policy has directed the production and marketing of American cotton," Erwin said, "there has been a break-away from the established concept of rigid controls."

"The new concept entails a measure of freedom designed to make American cotton more competitive."

Erwin spoke as chairman of a five-man delegation from the American Cotton Manufacturers' Institute invited by the Federation. The U.S. textile industry trade association is not a member of the group but usually sends observers to its meetings.

Other members of the delegation include F. E. Grier, president of Abney Mills, Greenwood, S.C., and chairman of the board of Erwin Mills, Durham, N.C.; J. Craig Smith, president of Avondale Mills, Sylacauga, Ala., who also represents the National Cotton Council; R. Houston Jewell, vice-president of Crystal Springs Bleachery, Chickamauga, Ga., and Robert C. Jackson, executive vice-president of the Institute, Washington, D.C.

Erwin told the Federation the U.S. Congress "made its first major move in years" to help the cotton industry in

providing a way for American growers to increase their acreages in 1959.

He said the new minimum national acreage allotment will be 16 million acres instead of 13,750,000 which was in prospect if the Congress had not changed the cotton policy.

"This action," said Erwin, "while not solving in one stroke the crisis created by long years of inattention, is most

heartening and does offer the first bright ray of hope toward the attainment of the goals we have urged so vigorously."

Erwin also said: "We are still saddled with a two-price cotton marketing system which, unquestionably, has helped prevent American cotton from being competitive both in domestic and foreign markets."

"We have not relinquished our conviction that changes are and will be necessary in the future and we are encouraged by the belief that members of the Congress gained a keener understanding of the problems of our industry which will be helpful in the future."

Directors Are Elected By Carolinas Ginners

Carolinas Ginners' Association announces the election of the following directors:

District No. 2, S.C.—R. B. Dinkins, E. M. O'Tuel, and S. W. Poston.

Central District, N.C.—N. J. Oliver, E. L. Peterson and David N. Guy, re-elected.

Eastern District, N.C.—Groves Simpson, W. R. Caudle and W. J. Long, Jr., all re-elected.

Retiring directors are Charles Lynch, Bill Britton, and Calvin Rivers. Another director, S. G. Thomas, died in June.

Fabric Claims Contested

The Federal Trade Commission is acting to stop claims of other fabrics that they have the distinctive properties of wool. The FTC ordered firms to stop saying their products "look" or "feel" like wool.

Record Crop for Lubbock

Lubbock County, Texas, expects a record cotton crop of 250,000 bales this season. New Deal Gin Co. ginned the first bale in the county Aug. 26.

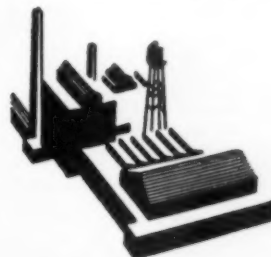
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Cotton — — Research Progress

(Continued from Page 8)

and the tediousness of its measurement, promises to be an important index of cotton quality, not only for processing but also for textile properties and performance. An instrument developed at the University of Tennessee¹ is capable of giving a rapid, sensitive and practical measurement of elongation properties of cotton fibers.

This instrument, called the Stelometer, made possible studies which

showed that yarn elongation is strongly dependent on fiber elongation. Further investigations are expected to establish the effect of fiber elongation on abrasion resistance and tear strength of cotton fabrics.

It is believed that, with sufficient fundamental knowledge, improved soil resistance might be built into cotton fabrics, and studies are underway to develop information on the nature and

mechanism of the soiling of cotton. Electron microscope pictures show that fiber surfaces of all varieties of cotton are wrinkled and grooved. There are as many as 50,000 grooves per inch of fiber length; minute particles of solid soil become mechanically entrapped in these surface grooves. Soil is also deposited in the folds and large crevices of the fiber, and between fibers in a yarn. Much loose soil is removed by vacuum cleaning but fine particles embedded in the fiber surface are not. Surface detail of the cotton fiber can be changed by bleaching, mercerization, and most additive finishes or modifications. Bleached fabrics are more susceptible to soiling than unbleached, but saturation of potential soil sites with finely divided white materials, such as colloidal silica or alumina, improves the soil resistance of all cotton fibers. In addition to mechanical entrapment of fine particles, surface energy effects may also play a major role in soiling. When the major causes of soiling have been pinpointed, research workers and the textile industry can intelligently attack the problem of developing practical procedures for enhancing the soil-resistance of cotton for upholstery, draperies, carpets, clothing, etc.

Basic studies have shown that treatment of cotton with certain chemicals, such as ethylamine, will permit the cotton to stretch to a greater degree than normal untreated cotton. The treatment, decrystallization, also improves the affinity of the cotton for dyes and some other chemicals.

• **Chemical Modification of Cotton**—Approximately 60 percent of the cotton consumed in this country falls in uses which require some textile finishing, such as scouring, bleaching and mercerization. These treatments are required to remove noncellulosic and pectic materials so that subsequent operations, such as dyeing, will result in a more uniform fabric. A thorough understanding of the physical and chemical constitution of the outer membrane of the fiber and changes that take place after finishing operations is vital for further research to produce modified fabrics for specialized end uses.

From microscopic observations it was determined that length of time, rather than concentration of alkali, is the dominant factor in removing noncellulosic constituents during alkali scouring. Bleaching, especially with peroxide, removes the last residues of noncellulosic materials. Mercerization, in itself, apparently removes little of the noncellulosic material of the primary wall, but does cause swelling of secondary walls.

A recent discovery shows how excellent resistance to sunlight can be added to the outstanding mildew- and rot-resistance of partially acetylated cotton. This is achieved by a combination process: Cotton is first dyed with certain light-stable vat dyes and then treated with the chemical called acetic anhydride to cause partial acetylation. Vat dyeing alone or partial acetylation alone does not make cotton significantly more resistant to deterioration by sunlight. From results of weather exposure tests, it is estimated that the combination process applied to cotton will increase its outdoor service life two- or three-fold. This should significantly improve cotton's competitive position in markets, both civilian and military, requiring excellent resistance to weathering. The

Table I. Chemically Modified Cottons

Modified Cotton	Principal Properties	Principal Uses	Potential Uses
Wrinkle-resistant wash-wear	Enhanced resilience elastic recovery and rot resistance	Wrinkle-resistant wearing apparel, wash-wear garments, household goods.	
Water repellent	Water shedding	Rain-wear garments.	
Acetylated cotton	Greatly improved resistance to rot and heat. Improved insulating properties (electrical).	Ironing board covers, dye resist yarns, electrical insulation.	Paper makers dryer felt.
Alkali-soluble	Soluble in moderately alkaline solutions	Scaffolding textile products.	
Soluble gauze	Soluble in body fluids.	Surgical dressing.	
Flame-resistant cottons	Resistant to burning. Rot and wrinkle resistance.	Wearing apparel and household goods.	Tents, awnings, tarps.
Lead chromate treated	Improved weather resistance.	Shade cloth for tobacco.	
Slack mercerization	Improved elongation and elastic properties, kinkiness, cling.	Elastic bandage and fabrics.	

Table II. Estimated costs of treating cotton to make chemically modified cottons¹.

Chemically Modified Cotton	Cents		Assumed Annual Production (Million)	Remarks
	Lb.	Yd.		
Wash-wear trousers		23 ²	0.875	
Partially Acetylated cotton yarn	14.2	—	61.5 lbs.	15% acetyl; 90% chemical recovery
Partially Acetylated fabric 60" wide 8 oz./1 in. yd.	16.8	9.6	12.1 yds.	15% acetyl; 48 x 48 sheeting; 90% recovery; 9.2 oz./1 in. yd. finished weight
Fully Acetylated yarn	41.0	—	6.5 lbs.	40.6% acetyl; 90% chemical recovery
Carboxymethylated fabric 60" wide 6.15 oz./1 in. yd.	9.15	3.9	25.2 yds.	80 square print cloth D.S. 0.095; 6.82 oz./1 in. yd., finished weight
THPC flame-resistant fabric 60" wide 13 oz./1 in. yd.	15.0	14.2	60.5 yds.	8 oz. O.D. twill; 16.6% add-on, 15.1 oz./1 in. yd. finished weight
Aminized fabric, 60" wide 6.15 oz./1 in. yd.	29.1	11.5	5.04 yds.	80 sq. print cloth; 0.7% N; 6.32 oz./1 in. yd. finished weight
Hydroxyethylated fabric (using ethylene oxide) 60" wide 6.15 oz./1 in. yd.	16.3	7.4	25.2	80 sq. print cloth; D.S. 0.6; 14.3% add-on 7.26 oz./1 in. yd. finished weight

¹ Calculated for favorable conditions; cost for isolated runs would be higher.

² Cost per garment.

end uses requiring weather resistance are large. For example, the potential markets in tarpaulin, awning, tentage, field covering, sewing thread, beach umbrella, and auto top end uses amount to between 250,000 and 300,000 bales per year.

Following the announcement of cyanoethylated (CN) cotton by the Institute of Textile Technology, the Southern Laboratory cooperated with several other organizations in studying the preparation and evaluation of this product. Uniform treatment of cotton to an optimum degree with acrylonitrile was achieved through control of processing conditions such as temperature, flow rate, and catalyst concentration. Several organizations are evaluating the physical and chemical properties of these fabrics, and service-testing them in promising end products, such as shoe threads, sewing thread, reinforced rubber products, fish netting, padding, nonwoven fabrics, and military webbing. Results thus far look promising, but it is too early to make predictions regarding the eventual success of CN cotton.

In connection with soiling, and of immediate practical value, is the development of "on location" cleaning of cotton carpets under a research contract with the Hoover Co. Unlike most conventional rug and carpet cleaning methods, this new method does not flow detergent solution onto the carpet. Instead, large quantities of fresh, pregenerated suds are applied and worked outward through the carpet pile, then sucked up almost instantly through a vacuum nozzle surrounding the periphery of the

brush. The pile of the carpet is lifted with a rake and rapidly dried with silica gel. After two hours drying, pile restoration can be quickly accomplished by an agitator-type vacuum cleaner. Field evaluations indicate that this method is more rapid and efficient than conventional procedures currently used.

Several excellent, durable flame-retardants have been developed at Southern Regional Laboratory in cooperative research with the Quartermaster Research and Development Command. One of these is based on two very reactive phosphorus compounds, called APO and THPC. These abbreviations refer to tris (aziridinyl) phosphine oxide and tetrakis- (hydroxymethyl) phosphonium chloride. These are dissolved in water and applied to cotton by a simple process. When heat cured, the two compounds produce the flame-retardant inside the cotton fiber in a form that cannot be removed by repeated laundering and drycleaning. The amount of material added to the cotton is low, about 12 percent, and there is no noticeable change in the appearance or feel of the fabric. An outstanding advantage is that the treatment can be applied to raw cotton before it is carded, spun and woven into fabric.

THPC is available commercially in this country as a result of a previous development of the Southern Utilization Research and Development Division, and APO is imported.

The polymer formed by the reaction of triallyl phosphate and bromoform is another permanent flame-retardant that can be modified with plasticizers to

minimize losses in tear strength and flexibility. Large scale applications are being evaluated by the Quartermaster General.

In cooperation with industry and the National Cotton Council, cotton shirts and trousers that are resistant to wrinkles, permanently creased, and that may be washed and spun in an automatic washer and dried in a tumble dryer have been produced in the laboratory.

Using inexpensive commercial resins with new methods of application, cotton garments have been treated and the resin cured in place by simply pressing with an electric iron. These garments may be washed and tumble dried without the need, as with some wash-and-wear garments, of tedious hand laundering followed by "drip-drying." This improved formulation has also avoided an early tendency toward wet-soiling during laundering. It is anticipated that these treatments can be applied at low cost in commercial drycleaning plants. Research along these lines is being carried out by the National Institute of Drycleaning, Silver Spring, Md.

Preliminary results show that it is possible to produce a "no-muss" cotton dress trouser from resin-treated yard goods. This is done by a "recuring" process, which allows the wrinkle resistant cotton to be realigned so as to produce creases where desired.

Perhaps as many as two billion square yards of cotton are resin-treated each year, much of it is to give dimensional stability. Results of the research des-

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cribed above should benefit the garments produced from about a third of this total. The final development of this project and its commercial application are aimed particularly at the men's summer-weight dress suits and slacks market currently dominated by other fibers.

New crease resistant resins introduced by the Southern Laboratory include such cross-linking agents as APO and CBA (carbonyl bis-aziridine). These compounds also impart desirable collateral properties such as freedom from chlorine retention and resistance to burning.

A recent study of application techniques of methylolmelamine resins to cotton has revealed a new and practical method for producing cotton fabric with outstanding rot resistance and improved weather resistance. This method is based upon the use of a fresh acid colloid of methylolmelamine. Rot resistance of the treated fabrics is comparable to that of partially and fully acetylated and cyanoethylated fabrics.

Seventy-four inorganic compounds never before used to finish cotton textiles were studied at Texas Women's University¹. Nine of these metallic pigments seem to offer promise of improving certain end use characteristics of the fabrics. Results indicate that two cobalt salts (cobaltous hydroxide and cobaltous metaborate) can increase weather stability three- to six-fold and rot resistance up to ten-fold. Colorless and inexpensive salts such as magnesium and aluminum hydroxides impart weather and some flame resistance.

Other chemical treatments worthy of mention include: The cotton conforming gauze bandage; fluorochemical treatments to make cotton repel water and oil; improved awing treatments resulting from pigment and coating evaluations; fully acetylated (FA) cotton, a semi-thermoplastic cotton, that can be durably calendered, embossed and pleated; low-cost cotton products having excellent resistance to rot and good resistance to chemical attack and abrasion

prepared by polymerizing acrylonitrile vapors within and upon the cotton fibers; the development of long-life tobacco shade cloth; and alkali-soluble cotton used in scaffolding textile products. Tables I and II describe the chemically modified cottons now available commercially and provided estimates of their manufacturing costs.

• **Mechanical Processing of Cotton**—Increased processing efficiency, and improved yarn and fabric uniformity are being achieved by the cotton textile industry by use of drafting guides developed by the Southern Division. Better proportionment of drafts was obtained on the long-draft roving systems, commonly used for processing all lengths of American cottons. Draft guides applying these research findings can be used to produce higher quality yarns, thus enabling the production of higher quality cotton fabrics.

Conventional textile equipment does not satisfactorily clean cotton that contains an excess of trash. The need for better cleaning equipment is indicated by the fact that about one-half of the 1956 crop was either machine harvested or hand snapped; both methods produce lower grade cotton than does clean hand picking. The quantity of such cotton containing large amounts of trash is estimated at 27 percent of the 1956-57 crop compared to 23 percent for 1955-56.

A five-fold increase in the cleaning efficiency of cotton textile pickers has been made possible with the development of the ARS Carding Cleaner. Essentially, the Carding Cleaner is a modification of a conventional cotton textile picker wherein the standard beater and feed systems of the picker have been replaced with a specially designed beater and a unique type feed system. Recent pilot-scale tests with five popular varieties of cotton revealed unusually high cleaning efficiencies, ranging from 47 to 55 percent at production rates of 435 pounds per hour. No fiber damage was observed, and lint losses were remarkably low at from 0.08 to 0.38 percent.

Normally, two to three conventional cleaning machines or five picker sections are required for the same amount of cleaning; lint loss in each of these machines usually amounts to about three times that in the Carding Cleaner. Work is now in progress to increase cleaning efficiency still further, and improve the uniformity of the laps produced.

A new type opener-cleaner shows great promise for effectively cleaning mechanically- and roughly hand-harvested cottons in textile mills. The Opener-Cleaner retains the opening and blending features of the highly successful and previously commercialized SRRL Cotton Opener and includes means for cleaning which removes 33 percent of the trash from cotton at the high production rate of 1500 pounds per hour. Six manufacturers of textile machinery are licensed under USDA patents to produce this machine.

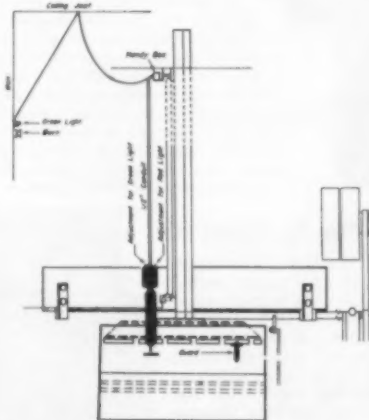
The Fabric Research Laboratories² have found that cotton draping properties can be improved by about 43 percent (through structural changes in yarns and fabrics and the application of resin linking softeners) without adversely affecting the weight, air permeability, and tear strength of such fabrics. It is expected that this improved fabric will help to hold cotton's market for clothing and household use.

A lightweight steep twill cotton fabric designed by Southern Regional Research Laboratory has been officially adopted by the Navy for use in summer flight uniforms. This fabric resulted from an investigation of the effect of fabric construction factors, such as types of weave and ends and picks per inch, on fabric cover and air permeability. Field evaluations led to the approval of this lightweight steep twill cotton fabric for summer flight uniforms and the issuance of Military Specifications C-18387A (Aer).

Several dense cotton fabrics, woven with the ARS Loom Attachment, are under evaluation by the Navy for use in rainwear and for anti-exposure suits for flyers. Interest in water and wind resistant fabrics led to the development of a loom attachment to facilitate weaving of high density and hard to weave fabrics, improve fabric cover and ease the mechanical strain on the loom. Experience has shown that fabrics of sufficient density can be woven with the aid of the loom attachment to obtain wind and water resistance without the use of chemical agents. Light weight tarpaulins were fabricated for field testing that were treated chemically only for mildew resistance. After six seasons' service at a professional baseball park the fabric had not leaked under conditions of heavy rainfall, and still retained good water resistance. Concurrent laboratory scale exposures were made to determine the effectiveness of the new weave as compared to that of a commercial tarpaulin, treated for water resistance. The hydrostatic pressure required to cause water to penetrate the commercial fabric decreased 41 percent after six months' exposure, while resistance of the high pickage fabric decreased only five percent. The attach-

¹ Research carried out under contract for the Agricultural Research Service, U.S. Department of Agriculture under the supervision of the Southern Regional Research Laboratory.

² The mention of organizations and commercial products should not be construed as an endorsement of these over others not mentioned.



Save Money with the Waller Bale Gage!

The Waller Bale Gage has proved its superiority over all other methods of making uniform bales. It furnishes complete protection for your press. No more penalties to pay.

Simple to install and inexpensive to operate. Used wherever cotton is grown.

Approved and sold by several gin machinery manufacturers. Also widely used by cottonseed oil mills for baling linters.

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ment is commercially produced by two manufacturers of loom equipment.

Using new information developed through research in the Southern Division and in other organizations, ARS scientists have developed a clear picture of the extent and nature of the damage that occurs when cotton is ginned or mechanically worked under conditions of excessive heating. Industry leaders have been seriously concerned with the deterioration in quality of American cotton attributed to excessive heat drying of seed cotton prior to ginning. This drying removes moisture from the cotton fibers and causes temporary embrittlement and reduction in strength. Mechanical working of these fibers in the dry state by textile machinery, gins or lint cleaners causes excessive fiber breakage and results in an increase in the quality of short fibers and consequently a decrease in the average fiber length. The strength is recovered, however, when the fibers are permitted to absorb moisture. Temperatures normally used in the cotton gin are insufficient by themselves to cause an appreciable amount of permanent heat damage to the cellulose fiber.

Utilization Outlook

The developments previously described are of direct practical value to the industry. These achievements—in many instances the result of cooperative research with other organizations—have benefitted the producers, processors and consumers of cotton and its products.

The dollar value of these developments can't be measured accurately. Nevertheless, it can be estimated that the total annual value of all the products and processes stemming from this work is high, certainly higher by many times than the expenditure of funds for the research. Developments now undergoing evaluation indicate that utilization research on cotton will continue to bring high profits.

In maintaining cotton markets, and establishing new and increased uses for cotton, it is estimated that USDA's utilization research, to date, has been responsible for developments valued at \$255 million. The increased usage resulting from these developments has been estimated at 1,007,750 bales of cotton.

Some success as a result of cotton research is evidenced in fiber statistics for 1957. Figures show that, while cotton consumption in 1957 was nine percent below the 1955 use, cotton's share of the fiber market in 1957 was as large as it was in 1955. Cotton has gained substantially in the wearing apparel field in recent years and made minor gains in the household goods field in spite of keen competition from the synthetics, plastics, etc.

Trends of the recent past indicate that markets for U.S. cotton could increase over the next few years. The extent of the increase will depend upon many factors. Utilization research will undoubtedly play an important part in helping cotton extend present markets and enter new ones.

U.S. Farm Products Displayed

USDA and trade associations have displayed American farm products at the British Food Fair in London, which started Aug. 28. "A Country Fair Cook Book" provides visitors with 30 typical U.S. dishes.



Hardwicke-Etter Offers New Service to Arizona

GARRETT SUPPLY CO., Phoenix, Ariz., has been appointed as regional warehouse for Hardwicke-Etter Co. to handle parts and supplies for cotton gins in that area. The company is a division of The Garrett Corp. Its new one-story concrete and brick building contains 25,000 square feet of floor area and is surrounded by nearly five acres of parking space. The structure features the only refrigerated tool and supply warehouse in the Southwest, according to Edwin R. Castle, manager. Three 15-ton refrigeration units supply more than comfort to customers and warehouse personnel. Refrigeration, with provision to control dust and humidity, enables the firm to stock a large inventory for rapid off-the-shelf delivery without risk of deterioration. The new building, on 29th Drive and East Thomas Road, will carry a complete stock of Hardwicke-Etter ginning machinery parts. Other Hardwicke-Etter regional warehouses are located in Memphis, Tenn.; Alexandria, La.; Corpus Christi, Lubbock and El Paso, Texas; and Fresno, Calif.

Conference Dates Set

Feb. 10-12 have been announced as the dates for the sixth annual Agricultural Chemical Conference at Texas Technological College, Lubbock. The school, West Texas Chamber of Commerce and others sponsor the event.

Cotton Board Organized

Venezuela is organizing a National Cotton Board. This is part of a plan to increase cotton production and reduce cotton and textile imports, USDA points out. Venezuela grew about 22,000 bales of cotton in 1957-58, while mills consumed 32,000.

More Soybeans in Japan

Japan will produce 17,500,000 bushels of soybeans in 1958, four percent more than last year, USDA reports.

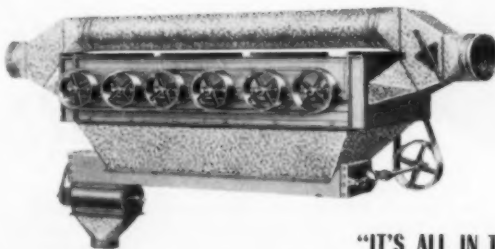
Wheat Traded for Cotton

Spain has arranged to trade flour and wheat to Egypt for an unannounced quantity of cotton, according to USDA.

Sunflower Seed Crop Down

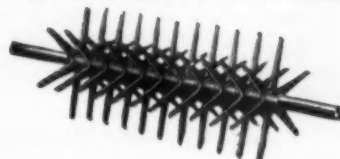
Yugoslavia's supply of oilseeds for crushing in 1958, says USDA, will be curtailed by a 20 percent reduction in the sunflower seed crop to 84,000 short tons. Drouth reduced the crop.

6-Cylinder STACY AIRLINE CLEANER WITH BY-PASS



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Not Even in Chitling Switch

No Man Can Ever Win

CHITLING SWITCH, ARK.
SEPT. 5, 1958.

DERE MR. EDITOR:

Some other old goat and me was talking about buying seed in the early days and he ended it by saying that sauce for the goose was sauce for the gander. They is a flock of geese over by the mill and halving nothing to do I thought I would check up on this here saying. You can take it from Scientist Ubberson that a goose or a gander wont eat no sauce because I tried to feed them on it and all I got was a good flogging from

a old goose when I got too close to her goslings. If you half ever been flogged by a goose you ought to know that it is kinda like being run over by a hand car on a RR track. So they aint nothing to that saying.

Then I tackled another saying about a stitch in time saves nine and I figgered out that they is plenty of sense in that and it give me an idee and so I told my wife about the geese. She said you are the biggest fool that ever lived and I am glad that you got flogged. I said all right and ast her about the stitch saying and she said oh it is just a saying

and I said no it aint they is some sense to it and she said ha ha.

Well I said if you would go over my clothes about once a month and take a stitch in the buttons that is might nigh off it would save somebody from halving to sew about nine buttons on them later. Now you look here she said I am getting enough of yore smart remarks and she said how about all them cigarette ashes that you scatter all over the house and the matches and Heaven knows what else that you throw in the commode and how about all the mess that you make when you try to cook one of your slum gullions as you call them. I said listen I bought three No. 2 wash tubs and put them in living room, my bath room and my bed room to take care of that and you made me sell them and I only got one-half of what they cost. She said if you think any decent house wife is going to half her home cluttered up with a lot of wash tubs you are a candidate for the state hospital.

I said all this here talk aint keeping any buttons on my shirts but a stitch in time will do it and she said that one-half of the shirts I had was not worth sewing buttons on and I guess it was a draw, Mr. Editor. You just cant get the best of these here women in a argument.

YOUR'N,

B. Ubberson.

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Soybean Rate Requested

Midsouth Soybean Grain Shippers' Association and Missouri Cotton Producers' Association have requested the Interstate Commerce Commission not to suspend the 18 and 20 cent rates on soybeans shipped by water to New Orleans. C. C. Dehne, Sr., traffic representative, took the action.

Brokers Move in Dallas

Gordon-Kutner Co., Dallas, has moved to 1232 National Building. The brokers in vegetable oils and meals have the same phone number: RI-7-4221.

Arizona Plans Field Day

Research with cotton and other crops will be explained Sept. 26 at the field day at the Arizona Experiment Station Farm at Safford.

Fire Destroys Cotton

Fire destroyed about \$24,000 worth of cotton Aug. 26 at J. W. Wallace Gin, Edinburg, Texas.

• Food Firms Among Top Advertisers

TWENTY-ONE food firms, associated directly or indirectly with fats and oils, were among the nation's 100 leading advertisers last year. These 100 advertisers increased their expenditures to \$2,200,000,000 in 1957, seven percent more than in 1956, Advertising Age reports.

General Foods, with an estimated \$87,000,000 spent for advertising in 1957 compared with \$77,700,000 in 1956, led among food advertisers and was the fourth largest U.S. advertiser.

Advertising Age listed the following leading advertisers among food firms as compared with 1957 total, in parenthesis:

National Dairy Products Corp., \$38,000,000 (up from \$37,470,000); American Home Products Corp., \$36,000,000 (\$29,000,000); Borden Co., \$24,500,000 (\$23,700,000); National Biscuit Co., \$21,000,000 (\$20,000,000); Swift & Co., \$20,000,000 (\$26,000,000); Campbell Soup Co., \$19,600,000 (\$20,000,000); Standard Brands Inc., \$19,000,000 (\$16,567,174); Kellogg Co., \$18,000,000 (\$18,000,000); Armour & Co., \$16,000,000 (\$16,000,000); Pillsbury Mills, \$16,000,000 (\$18,000,000); Quaker Oats Co., \$16,000,000 (\$13,000,000); Continental Baking Co., \$15,602,175 (\$11,809,416); Corn Products Refining Co., \$11,800,000 (\$11,000,000); Carnation Co., \$11,000,000 (\$10,527,647); Nestle Co., \$11,000,000 (\$11,527,000); Ralston Purina Co., \$10,000,000 (\$8,000,000); H. J. Heinz Co., \$9,500,000 (\$8,500,000); Best Foods Inc., \$9,000,000 (\$8,500,000); Wesson Oil & Snowdrift Co., \$8,000,000 (\$8,000,000); and California Packing Corp., \$7,250,000 (\$5,750,000).

Long-Staple Cotton Crop Much Smaller in Sudan

Cotton production in Sudan dropped sharply in 1957-58, USDA reports. The crop of 225,000 bales is 64 percent below last year's record production, although acreage was only about six percent smaller.

Weather, insects, disease and flooding reduced the Sudanese crop of extra-long staple cotton from 582,000 bales in 1956-57 to 165,000 bales in 1957-58. Production of shorter staples of American types increased from 36,000 bales the previous season to 60,000 in 1957-58.

Exchange Honors Johnson

Walter L. Johnson has received a citation for 50 years of service to the New York Cotton Exchange. Johnson joined Shearson, Hammil and Co. when it was founded in 1902, and was elected to the New York Cotton Exchange in 1908. He was instrumental in organizing the New York Cotton Exchange Clearing Association, which he headed for 30 years; and in the adoption of "Southern delivery," providing for contracts based on delivery at key Southern markets.

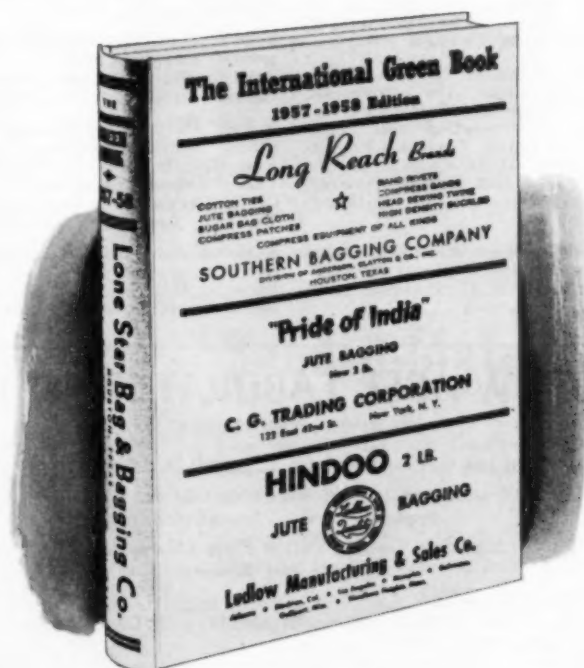
Feed Program Announced

Dr. E. L. Stephenson has announced the program for the Arkansas Formula Feed Conference, Sept. 18-19 at Fayetteville. The meeting is sponsored by the University of Arkansas and the feed industry.

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(NOTE: Generally, cottonseed oil mill listings in the United States show officers, addresses, equipment and rail location. Many of the other vegetable oil mill listings in the United States, Canada and Latin America also give this information.)

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CALENDAR



• Oct. 20-22—American Oil Chemists' Society fall meeting. Chicago. For information, write AOCS headquarters, 35 East Wacker Drive, Chicago.

• Oct. 21-22 — Spinner-Breeder Conference. Lubbock, Texas. (In conjunction with USDA Cotton and Cottonseed Advisory Committee meeting and South Plains Maid of Cotton Contest.) For information, write Delta Council, Stoneville, Miss., or Plains Cotton Growers, Inc., Lubbock National Bank Building, Lubbock.

• Dec. 6 — Tri-States Oil Mill Superintendents' Association Regional meeting. Greenville, Miss. J. C. Holloway and Billy Shaw, co-chairmen.

• Dec. 17-18—Beltwide Cotton Production Conference. Rice Hotel, Houston, Texas. For information, write National Cotton Council, P. O. Box 9905, Memphis 12, Tenn.

1959

• Jan. 30 — Oklahoma Cotton Ginners' Association annual convention. Skirvin Hotel, Oklahoma City. Mrs. Roberta Reubell, secretary, 307 Bettes Building, Oklahoma City.

• Feb. 8-10—Texas Cooperative Ginners' Association, Texas Federation of Cooperatives and the Houston Bank for Cooperatives, annual joint meeting, Convention Center, Galveston. Bruno E. Schroeder, executive secretary, 307 Nash Building, Austin, Texas.

• Feb. 9-10—National Cotton Council annual meeting. Dinkler Plaza Hotel, Atlanta. For information, write National Cotton Council, P. O. Box 9905, Memphis.

• Feb. 16-17 — Cottonseed Processing Clinic. Southern Regional Laboratory, New Orleans. Sponsored by USDA and Valley Oilseed Processors' Association. C. E. Garner, 416 Exchange Building, Memphis, Association secretary.

• March 3-4—Western Cotton Production Conference. Westward Ho Hotel, Phoenix, Ariz. Southwest Five-State Cotton Growers' Association and National

Cotton Council, P. O. Box 9905, Memphis 12, sponsors.

• March 9-11—Midsouth Gin Supply Exhibit. Midsouth Fairgrounds, Memphis. Sponsored by Arkansas-Missouri Ginners' Association, Tennessee Ginners' Association and Louisiana-Mississippi Ginners' Association, which will have annual meetings in conjunction with Exhibit. For information on exhibit, write W. Kemper Bruton, P. O. Box 345 Blytheville, Ark.

• March 12-14—Texas Cotton Association annual convention at the Statler Hilton Hotel, Dallas. L. T. Murray, Waco, executive vice-president.

• March 13-15—West Coast Division, International Oil Mill Superintendents' Association, annual meeting. Bakersfield, Calif. Harold F. Crossno, California Cotton Oil Corp., Los Angeles, general chairman.

• April 5-7—Texas Cotton Ginners' Association annual convention, State Fair of Texas grounds, Dallas. Edward H. Bush, executive vice-president, P. O. Box 7665, Dallas.

• April 6-7 — Valley Oilseed Processors' annual convention, Buena Vista Hotel, Biloxi, Miss. C. E. Garner, 416 Exchange Building, Memphis, secretary.

• April 17-18—Oklahoma State Cotton Exchange convention. Lake Texoma Lodge. For information write Mrs. M. Rascoe, secretary-treasurer, 244 American National Building, Oklahoma City 2.

• April 21-22 — National Cotton Compress and Cotton Warehouse Association, annual meeting at the Galvez Hotel, Galveston, Texas; an equipment show will be held at the Moody Center at Galveston. For information write John H. Todd, executive vice-president, P. O. Box 23, Memphis 1.

• May 10-11-12 — National Cottonseed Products Association annual convention. Mark Hopkins and Fairmount Hotels, San Francisco. John F. Moloney, 43 North Cleveland, Memphis, secretary-treasurer.

• June 7-8-9—Texas Cottonseed Crushers' Association annual convention. Shamrock Hotel, Houston. Jack Whetstone, 624 Wilson Building, Dallas, secretary-treasurer.

• June 7-8—Tri-States Oil Mill Superintendents' Association annual convention. Buena Vista Hotel, Biloxi, Miss. B. C. Lundy and Woodson Campbell co-chairmen.

• June 14-16—Southeastern Cottonseed Crushers' Association meeting. The Castle in the Clouds, Lookout Mountain, Tenn. For information write, C. M. Scales, secretary, 318 Grand Theatre Building, Atlanta 3.

• June 21-23 — International Oil Mill Superintendents' Association annual convention. Galvez Hotel, Galveston, Texas. H. E. Wilson, secretary-treasurer, P. O. Box 1180, Wharton, Texas.

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Day after day, a constant stream of vegetable oils comes from producers throughout the South to be processed at southern Procter & Gamble plants. Tremendous quantities of these oils go into the making of Crisco, Primex, Sweetex and Flake-white shortenings, and Puritan Oil.

The processing done at these plants benefits countless people throughout the South. The users of our products made from south-produced oils... the many southern firms that supply P&G with services and materials... the P&G workers themselves. In addition, the money P&G spends on payrolls and taxes benefits every community where its plants are located.



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AND USERS OF COTTONSEED OIL, SOYBEAN OIL AND PEANUT OIL

Ginners Ask Rate Increase

Oklahoma Cotton Ginners' Association has petitioned the Corporation Commission for an increase in the ginning rate from 60 cents per hundred to 70 cents. The Association estimates that 277 gins had a loss of \$352,944.48 under the 1956-57 ginning rate, and 250 gins lost \$168,320.00 in 1957-58.



Cantrell Appointed

W. C. CANTRELL, Fort Worth, now represents Hubert Phelps Machinery Co. in Texas and Mexico. His appointment has been announced by Ivo B. Phelps, Little Rock. Cantrell is widely known in the machinery field, and is president of the Oil Mill Machinery Manufacturers' and Supply Association.

Sales Training Expanded By Cotton Council

The expanded sales training program of the National Cotton Council is reaching many stores this season. In June, for example, a 115 stores and 4,000 salespersons were told the story of cotton's advantages.

In addition to staff visits to key cities, the Council distributes cotton training kits to firms in smaller places. Each kit contains a teaching manual, sample booklets and list of films available to help store officials do their own training of personnel.

Watershed Congress Program

Twenty national farm and business organizations are the sponsors of the fifth National Watershed Congress in Dallas. Sessions will be at the Statler-Hilton Hotel, Sept. 29-Oct. 1.

Two days of discussions will be followed by an all-day bus tour of the Trinity Watershed. Discussion topics will be: The Still Urgent Need for a Land and Water Policy; Federal Agency Conflicts in Programs, Practices, and Policies; Maximum Benefits in Watershed Developments; Cities are in Watersheds, Too; The Need for Clean Water; The Need for More Treatment on the Land; and Progress and Problems in Watershed Development.

More Flaxseed Exported

Exports of U.S. flaxseed and linseed oil increased in the fiscal year ended last June 30, but less meal went abroad. USDA estimates exports of flaxseed at nine million bushels, four times those of the previous year. Linseed oil exports rose 10 percent to 87 million pounds. The 11,472 tons of linseed cake and meal exported were one-sixth the volume in 1956-57.

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For storing that valuable equipment when not in use—save time and money with an **ECONOMICAL STEEL UTILITY BUILDING** from The Murray Company of Texas, Inc.—a name that stands for over a half century of dependability and reliability.

A Murray steel frame and corrugated steel roofing and siding combine to make one of the most economical and long-lasting structures possible.

All materials used specifically with sound conservative engineering practices.

A monorail or traveling crane can be installed at little extra, and just think how handy this will be when overhaul time comes around.

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Why not have the best quality and the most economy—investigate the many fine features of a MURRAY dependable steel building, tailored to meet your requirements.

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Seed-O-Meter for Gins

A new device for continuous automatic weighing of cottonseed. Cost and installation is much less than the cost of installation alone on the old hopper-type scale.

- Records every five seconds
- Records by the second, the bale, the season—or all three
- Takes the guesswork out of splitting bales
- No stops, no delays, no labor
- No seeds get by without being weighed and recorded
- Economical, Dependable and Accurate.

Simple Installation — Write for further details and earliest delivery date.

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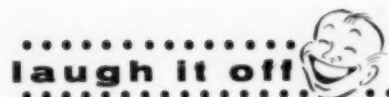
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The old country doctor parked his car, a Model T Ford, in front of the drug-store and went in to buy a few supplies.

When he came back out a large crowd of small boys were standing around his old car and laughing loudly at it. The doctor climbed into the seat and said in a mild tone of voice:

"The car's paid for, boys." Then he looked deliberately from one boy to another. "You're not, you're not . . . you're not."

"Hello," said a woman's voice over the phone. "Is this the Missing Persons Bureau? My husband has disappeared. Can you help me find him?"

"Certainly, Madam," said the Bureau Chief. "Will you describe him?"

"Of course, thank you," said the wife. "He's short and very fat. And bald. Likes blondes and alcohol. Wears thick glasses and has a high-pitched squeaky voice with a red nose. And he—oh, the h - - with him. Never mind."

A tourist holding his hat on his head with both hands and leaning into the wind asked a native in Oklahoma. "Does the wind always blow like this here?"

"Three hundred and sixty days a year it does," answered the native.

"What about the other five?" asked the tourist.

"That's cyclone weather," answered the native son.

Two friends met for the first time in years. "How are things?" one asked.

"I had a bad year last year," answered his friend. "My factory burned down, and I wasn't insured."

"That's too bad," the first man sympathized. "How is your wife?"

"Dead," came the unhappy reply. "Run over by a bus in December."

"I'm sorry to hear that. But how's the rest of the family?"

"My son got sent to jail."

"Gosh, that's tough." Then, desperately searching for a cheerful subject,

"How are you doing yourself?"

"Great!" came the jovial answer. "Business is wonderful—I sell lucky charms, you know."

Two rabbits were being chased by a pack of wolves when one turned to the other and said, "What are we running for, let's stop and outnumber them."

The other rabbit said, "Keep running, keep running—we're brothers."

A mother, annoyed because her 15-year-old daughter had been calling her boy friend too frequently, took a tip from a former wartime advertisement and posted a sign over the telephone: Is This Call Necessary?

Next day there appeared, pencilled on the card, a brief but logical reply: How Can I Tell 'til I've Made It?

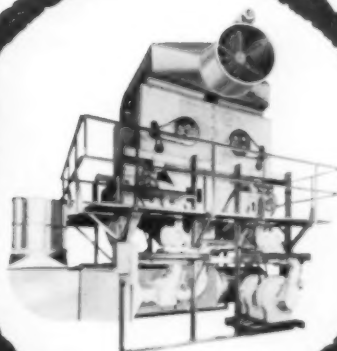
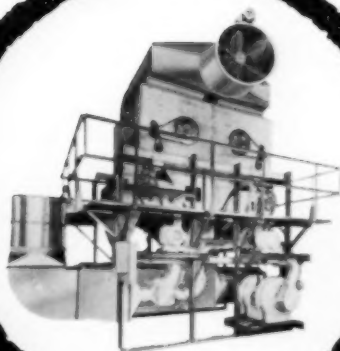
A fellow went up to the gate of a nudist camp on a chilly day and asked to be admitted. "Nothing doing," the guard spoke up. "This is a nudist camp, you can't come in here with that blue suit on."

"This isn't a blue suit," chattered the visitor, "I'm cold!"

stay in step with **PROGRESS**

MOSS "TANDEM" LINT CLEANING *means cleaning perfection*

Installation of a Moss Lint Cleaner behind a Moss or behind any other lint cleaner is proving practical in every section.



Quality cotton is going to be more in demand this season than ever before. Greater discounts will be imposed on the lower grades and spotted cotton. During the past season the progressive ginner who saw the trend to "tandem" cleaning and who provided this service for their customers report greatly increased volume and one to two full grades improvement was noted in every instance.

Cotton buyers and growers alike will seek out the gin that produces the higher grades.

You can stay in step with progress by letting Moss-Gordin show you the profit advantages of adding a second Moss. Don't let business pass by your gin when a small investment in Moss equipment can keep you at the top in meeting competition.

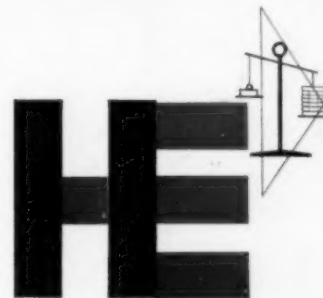
*Write today for remarkable **FACTS** and **FIGURES** on "tandem" cleaning.*

LINT CLEANER CO.

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COMBER - BLENDER - CLEANER

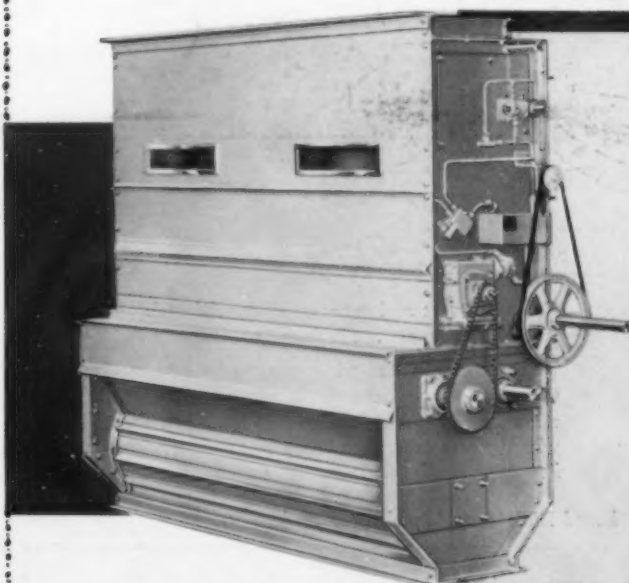


"LINTMASTER"

*"The Lint Finisher with the
Built-In Sample"*

HARDWICKE - ETTER CO.
COMPLETE GINNING SYSTEMS
SHERMAN, TEXAS

a regulated even feed...



The automatic Hydraulic Feed Control is built in two sizes, 52½" and 72" wide, and designed to provide a POSITIVE and EVEN feed of the seed cotton for all the overhead cleaning and drying equipment.

The Feed Control reduces choke-ups by providing an even feed through the entire system. It increases the efficiency of the machinery within the Gin Plant by allowing only the proper amount of cotton to pass through to feed the number of Gins within the plant.

This Feed Control device is arranged in the system so that cotton is passed through drying and overhead cleaning equipment **ONLY ONE TIME**. No two-sided bales because of a portion of the cotton being repeatedly cycled.

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